Index of Authors

Note. Entries marked with an asterisk (*) refer to communications made in title only.
Entries marked with a section mark (§) refer to contributions made to Symposia.
Small roman numerals refer to pages in *Proceedings of the Biochemical Society.*

ABRAHAM, E. P. *see* NEWTON, G. G. F. xxxii
ABUL-FADL, M. A. M. *see* KING, E. J. xxiv
ALBERT, A. The avidity of amino-acids for the ions of heavy metals. I. Amino-acids with only two ionizing groups xxxix
ALDRIDGE, W. N. Some properties of specific cholinesterase with particular reference to the mechanism of inhibition by diethyl *p*-nitrophenyl thiophosphate (E 605) and analogues 451
ALEXANDER, P., HUDSON, R. F. & FOX, M. The reaction of oxidizing agents with wool. 1. The division of cystine into two fractions of widely differing reactivities 27
AMINOFF, D., MORGAN, W. T. J. & WATKINS, W. M. Studies in immunochemistry. 8. The isolation and properties of the human blood-group A substance 426
ANDERSON, D. J. The estimation of nitrogen in dental enamel xii
ANDERSON, D. J. The solubility of enamel nitrogen xi

BAKER, R. W. R. Polarographic determination of lead in urine 606
BALDWIN, E. & MOYLE, V. Volatile fatty acids in *Ascaris lumbricoides* xli
BALÓ, J. & BANGA, I. The elastolytic activity of pancreatic extracts 384
BANGA, I. *see* BALÓ, J. 384
*BEARN, A. G., BILLING, B. H., PATERSON, J. C. S. & SHERLOCK, S. Some observations on the splanchnic blood flow in man, using the hepatic vein catheterization technique xxiii
BEECKMANS, M.-L. *see* POTJÁK, G. 99, 547
BENDER, A. E. & KREBS, H. A. The oxidation of various synthetic α-amino-acids by mammalian D-amino-acid oxidase, L-amino-acid oxidase of cobra venom and the L- and D-amino-acid oxidases of *Neurospora crassa* 210
BENTLEY, H. R. & WHITEHEAD, J. K. Water-miscible solvents in the separation of amino-acids by paper chromatography 341
BIDWELL, E. Proteolytic enzymes of *Clostridium welchii* 589
*BILLING, B. H. *see* BEARN, A. G. xxiii
BLACK, D. J. G., GETTY, J., COATES, M. E., HARRISON, G. F. & KON, S. K. Hatchability of eggs and the production of chicks for the assay of vitamin B_{12} viii
BLACKBURN, S. & LOWTHER, A. G. Separation of *N*-2:4-dinitrophenylamino-acids by partition chromatography on paper xxvii
BLASCHKO, H. & STIVEN, J. The action of enzymes on chlorophenylalanines 88
BOGGUST, W. A. *see* FEARON, W. R. 62
BOWES, J. H. The swelling of collagen in alkaline solutions. 3. Swelling in solutions of bivalent bases 530
BOWES, J. H. & KENTEN, R. H. The swelling of collagen in alkaline solutions. 1. Swelling in solutions of sodium hydroxide 1
BOWES, J. H. & KENTEN, R. H. The swelling of collagen in alkaline solutions. 2. Swelling in solutions of univalent bases 524
§BOYLAND, E. The biological significance of metabolism of polycyclic hydrocarbons ii
BRADFORD, N. M. & DAVIES, R. E. The site of hydrochloric acid production in the stomach as determined by indicators 414
*BRAIN, F. H. & HELLIWELL, P. Estimation of trichloroethylene in blood xi
BRAY, H. G., FRANCIS, G. E., NEALE, F. C. & THORPE, W. V. The metabolism of sulphapyridine containing radioactive sulphur in the rabbit 267
BRAY, H. G., NEALE, F. C. & THORPE, W. V. The constitution of hydroxysulphapyridine and synthesis of 2-amino-hydroxypyridines 506
BRAY, H. G., THORPE, W. V. & WHITE, K. Metabolism of derivatives of toluene. 4. Cresols 275
BRAY, H. G., THORPE, W. V. & WHITE, K. The fate of certain organic acids and amides in the rabbit. 10. The application of paper chromatography to metabolic studies of hydroxybenzoic acids and amides 271
BRIMLEY, R. C. *see* PARTRIDGE, S. M. 334
BROOKER, E. G. & SHORLAND, F. B. Studies on the composition of horse oil. 1. Composition of horse oil in relation to the depot fats of other pasture-fed animals 80
BURT, N. S. & ROSSITER, R. J. Lipids of rabbit blood cells. Data for red cells and polymorphonuclear leucocytes 569
BUTLER, J. A. V., PHILLIPS, D. M. P., STEPHEN, J. M. L. & CREETH, J. M. Some properties of the insulin core 74

CAMPBELL, J. G. *see* KERR, L. M. H. 278
CARPENTER, K. J. & KODICEK, E. The fluorimetric estimation of N^1-methylnicotinamide and its differentiation from coenzyme I 421
CHALLENGER, F. & LOWTHER, A. G. Experiments on the mechanism of the formation of methylthiol from *S*-methyl-L-cysteine in cultures of *Scopulariopsis brevicaulis* xviii
CHALMERS, M. I. *see* CUTHBERTSON, D. P. xvii
CHANCE, B. The reactions of catalase in the presence of the notatin system 387
CHANCE, B. & HERBERT, D. The enzyme-substrate compounds of bacterial catalase and peroxides 402
CHARLWOOD, P. A. The valences of protein ions from electrophoretic and membrane potential measurements 312
CHIU, C. Y. The effect of adrenal cortical preparations added *in vitro* upon the carbohydrate metabolism of liver slices. 2. The effect of some pure steroids upon carbohydrate synthesis, oxygen uptake and non-protein nitrogen 120
CHIU, C. Y. & NEEDHAM, D. M. The effect of adrenal cortical preparations added *in vitro* upon the carbohydrate metabolism of liver slices. 1. The effect of adrenal cortical extract (eschatin) upon synthesis of glycogen and of total carbohydrate 114
CLAYTON, J. C., FREE, A. A., PAGE, J. E., SOMERS, G. F. & WOOLLETT, E. A. Absorption and excretion of the mono-sodium salt of thyroxine labelled with radioactive iodine 598
COATES, M. E., HARRISON, G. F. & KON, S. K. The measurement of vitamin B_{12} by biological assay with chicks vii
COATES, M. E., THOMPSON, S. Y. & KON, S. K. Conversion of carotene to vitamin A in the intestine of the pig and of the rat: transport of vitamin A by the lymph xxx
COATES, M. E. *see also* BLACK, D. J. G. viii; THOMPSON, S. Y. xxx

CONSDEN, R. & GORDON, A. H. A study of the peptides of cystine in partial hydrolysates of wool 8
COOPER, P. D. *see* ROWLEY, D. 157
CORTIS-JONES, B., CROOKE, A. C., HENLY, A. A., MORRIS, P. & MORRIS, C. J. O. R. Studies on pituitary adrenocorticotrophin. 1. Ultrafiltration of the hormone 173
COX, R. I. *see* PATERSON, J. Y. F. xxix
COXON, R. V. & PETERS, R. A. The effect of oxygen and of cocarboxylase on the formation of citrate and α-ketoglutarate by pigeon brain homogenates 300
CREASEY, N. H. & GRAY, C. H. Supplementary enzyme in brown adipose tissue ix
CREETH, J. M. *see* BUTLER, J. A. V. 74
CROMWELL, B. T. The micro-estimation and origin of trimethylamine in *Chenopodium vulvaria* L. 578
CROOK, E. M. & LAW, K. The mode of action of glyoxalase xxxvii
CROOK, E. M. *see also* SALEM, H. M. xxxvii
CROOKE, A. C. *see* CORTIS-JONES, B. 173
CRUMPLER, H. R., DENT, C. E. & LINDAN, O. The amino-acid pattern in human foetal and maternal plasma at delivery xx
CURNOW, D. H. *see* LEGG, S. P. xix
CUTHBERTSON, D. P. & CHALMERS, M. I. Utilization of a casein supplement administered to ewes by ruminal and duodenal fistulae xvii

DALGARNO, A., GODDEN, W. & MCCARTHY, E. F. The effect of high- and low-plane feeding on the serum protein levels of pregnant ewes, foetuses and young lambs 162
DATTA, S. P., DENT, C. E. & HARRIS, H. Apparatus for mass-production two-way paper chromatography xlii
DATTA, S. P., HARRIS, H. & REES, K. R. Chromatography of 2:4-dinitrophenylhydrazones of keto acids on alumina xxxvi
DAVIDSON, J. N., LESLIE, I., SMELLIE, R. M. S. & THOMSON, R. Y. Chemical changes in the developing chick embryo related to the deoxyribonucleic acid content of the nucleus xl
DAVIES, R. E. & OGSTON, A. G. On the mechanism of secretion of ions by gastric mucosa and by other tissues 324
DAVIES, R. E. *see also* BRADFORD, N. M. 414
DENT, C. E. *see* CRUMPLER, H. R. xx; DATTA, S. P. xlii
§DICKENS, F. Biological aromatization of hydroaromatic compounds iii
DICKER, S. E. Changes in water and ion metabolism and in functions during the development of oedema in rats fed on protein-deficient diets 53
DODGSON, K. S., SMITH, J. N. & WILLIAMS, R. T. Studies in detoxication. 29. The orientation of glucuronic acid conjugation in chloroquinol 124
DRESEL, E. I. B. & MOYLE, V. Nitrogenous excretion of amphipods and isopods xxxiii

EDEN, E. A micro method for separating free and esterified vitamin A 259
EDEN, E. & SELLERS, K. C. Hydrolysis and esterification of vitamin A during absorption 261
EDSON, N. L. *see* LINDSAY, M. 248
ELLIOTT, D. F. & NEUBERGER, A. The irreversibility of the deamination of threonine in the rabbit and rat 207
ELLIS, G. W. Autoxidation of the fatty acids. 3. The oily products from elaidic and oleic acids. The formation of monoacyl derivatives of dihydroxystearic acid of αβ-unsaturated keto acids 129
EMERY, W. B., LEES, K. A. & WALKER, A. D. Observations on a growth factor for *Leuconostoc citrovorum* 572
ERNSTER, L. *see* LINDBERG, O. 43
EVANS, R. A. *see* EVANS, W. C. xxxviii
EVANS, W. C., JONES, N. R. & EVANS, R. A. The mechanism of the anti-aneurin activity of bracken (*Pteris aquilina*) xxxviii

FANTES, K. H., IRELAND, D. M. & GREEN, N. A colorimetric assay method for vitamin B_{12} xxxiv
FEARON, W. R. & BOGGUST, W. A. Pigments derived from tryptophan: (1) urorosein, (2) tryptochrome 62
FOLLEY, S. J. & FRENCH, T. H. The intermediary metabolism of the mammary gland. 3. Acetate metabolism of lactating mammary gland slices with special reference to milk fat synthesis 465
FOLLEY, S. J. *see also* POPJÁK, G. xxviii
FORSYTH, W. G. C. Studies on the more soluble complexes of soil organic matter. 2. The composition of the soluble polysaccharide fraction 141
FOX, M. *see* ALEXANDER, P. 27
FRANCIS, G. E. *see* BRAY, H. G. 267
*FRASER, R. & SCARLET, P. Determination of iodine in blood and urine xxvi
FREE, A. A. *see* CLAYTON, J. C. 598
FRENCH, T. H. *see* FOLLEY, S. J. 465; POPJÁK, G. xxviii

GALE, E. F. *see* NAJJAR, V. A. 91
GARDIKAS, C., KENCH, J. E. & WILKINSON, J. F. Bile pigment precursors in normal human erythrocytes 85
GARDINER, J. E. & KILBY, B. A. Some observations of the fate of bis(*dimethylamino*)-*phosphonous anhydride* in the rabbit xxxii
GARTON, G. A., GOODWIN, T. W. & LIJINSKY, W. The biogenesis of β-carotene in the fungus *Phycomyces blakesleeanus* xxxv
GEISER, M. *see* KING, M. xxv
GETTY, J. *see* BLACK, D. J. G. viii
GIBSON, Q. H. & HARRISON, D. C. A note on the urinary uroporphyrin in acute porphyria 154
GODDEN, W. *see* DALGARNO, A. 162
GOODWIN, T. W. & SRISUKH, S. A biochemical description of locust coloration xvii
GOODWIN, T. W. *see also* GARTON, G. A. xxxv
GORDON, A. H. *see* CONSDEN, R. 8
GORDON, J. J. Properties of brain pyrophosphatase 96
GOTTSCHALK, A. & PARTRIDGE, S. M. The interaction between simple sugars and amino-acids vi
GRAY, C. H. *see* CREASEY, N. H. ix
GREEN, N. *see* FANTES, K. H. xxxiv
GRINYER, I. *see* MCILWAIN, H. 620

HAAS, P. On certain peptides occurring in marine algae 503
§HAPPOLD, F. C. The oxidation of aromatic rings by micro-organisms in metabolism iv
HARRIS, H. *see* DATTA, S. P. xxxvi, xlii
HARRIS, J. I. & WORK, T. S. Lysine analogues as inhibitors of bacterial growth 190
HARRIS, J. I. & WORK, T. S. The synthesis of peptides related to gramicidin S and the significance of optical configuration in antibiotic peptides. 1. Tripeptides 196
HARRIS, J. I. & WORK, T. S. The synthesis of peptides related to gramicidin S and the significance of optical configuration in antibiotic peptides. 2. Pentapeptides 582
*HARRISON, C. V. *see* KING, E. J. xxvi
HARRISON, D. C. *see* GIBSON, Q. H. 154
HARRISON, G. F. *see* BLACK, D. J. G. viii; COATES, M. E. vii
HASLEWOOD, G. A. D. & WOOTTON, V. Comparative studies of 'bile salts'. 1. Preliminary survey x
HASLEWOOD, G. A. D. & WOOTTON, V. Comparative studies of bile salts. 2. The nature of pythonic acid x
*HELLIWELL, P. *see* BRAIN, F. H. xi
HENLY, A. A. *see* CORTIS-JONES, B. 173
HENRY, K. M. *see* MCNAUGHT, M. L. 32

HERBERT, D. *see* CHANCE, B. 402
HILL, A. V. The thermodynamics of the active state of muscle xli
*HILL, A. V. The thermodynamics of the active state of muscle. Equipment and methods xlii
HOCH, H. Comparison of electrophoretic patterns of human sera obtained in phosphate and in diethylbarbiturate buffer 539
HOCH, H. The steady state, a test for electrophoretic homogeneity 199
HOCKENHULL, D. J. D. A new apparatus for the determination of carbon in biological materials by wet combustion 605
HOLMAN, W. I. M. & LANGE, D. J. DE. The determination of *N*-methyl-2-pyridone-5-carboxylic acid in human urine 47
HOPKINS, R. H. & JHA, B. K. The selective hydrolysis of amylopectin and amylose by β-amylase 319
HOWARD, B. H. & RAISTRICK, H. Studies in the biochemistry of micro-organisms. 81. The colouring matters of *Penicillium islandicum* Sopp. Part 2. Chrysophanic acid, 4:5-dihydroxy-2-methylanthraquinone 49
HOWARD, G. A. & MARTIN, A. J. P. The separation of the C_{12}–C_{18} fatty acids by reversed-phase partition chromatography 532
HUBBARD, R. & RIMINGTON, C. The biosynthesis of prodigiosin, the tripyrrylmethene pigment from *Bacillus prodigiosus* (*Serratia marcescens*) 220
HUDSON, R. F. *see* ALEXANDER, P. 27
HUGHES, D. E. The effect of surface-active agents on bacterial glutamic decarboxylase and glutaminase 231
*HUNT, J. N. A three-dimensional scatter diagram xi

IRELAND, D. M. *see* FANTES, K. H. xxxiv

JHA, B. K. *see* HOPKINS, R. H. 319
JONES, N. R. *see* EVANS, W. C. xxxviii

KAYE, M. A. G. & STACEY, M. Observations on the chemistry of hyaluronic acid xiii
KEKWICK, R. A. Physico-chemical examination of blood-group A substance. *Addendum to* Studies in immunochemistry. 8. The isolation and properties of the human blood-group A substance (AMINOFF, D., MORGAN, W. T. J. & WATKINS, W. M.) 438
KENCH, J. E. *see* GARDIKAS, C. 85
KENTEN, R. H. & MANN, P. J. G. The oxidation of manganese by peroxidase systems 67
KENTEN, R. H. *see also* BOWES, J. H. 1, 524
KERR, L. M. H., CAMPBELL, J. G. & LEVVY, G. A. Further observations on changes on β-glucuronidase activity in the mouse 278
KILBY, B. A. *see* GARDINER, J. E. xxxii
KING, E. J., ABUL-FADL, M. A. M. & WALKER, P. G. King-Armstrong phosphatase estimation by the determination of liberated phosphate xxiv
KING, E. J. & GEISER, M. Haldane haemoglobin determinations with the photoelectric colorimeter xxv
*KING, E. J., RAY, S. C. & HARRISON, C. V. Increase in the silicosis-producing effects of small amounts of quartz by admixed coal dust xxvi
*KING, E. J. *see also* WALKER, P. G. xxiii
KLYNE, W. The molecular rotations of cardiac aglycones and toad poisons xxii
KLYNE, W. *see also* NEWHOUSE, J. P. xxiii
KODICEK, E. Microbiological assay of pure vitamin D_2 and vitamin D_3; possible function of non-ionic and ionic lipids for the bacterial cell xiv
KODICEK, E. *see also* CARPENTER, K. J. 421
KON, S. K. *see* BLACK, D. J. G. viii; COATES, M. E. vii, xxx; MCNAUGHT, M. L. 32; THOMPSON, S. Y. xxx
KREBS, H. A. *see* BENDER, A. E. 210

LANGE, D. J. DE *see* HOLMAN, W. I. M. 47
LAW, K. *see* CROOK, E. M. xxxvii
LAWSON, G. J. & STACEY, M. Observations on the structure of the specific polysaccharide of *Azotobacter chroöcoccum* xiii
LEES, H. A note on the copper-retaining power of a humic acid from peat soil 450
LEES, K. A. *see* EMERY, W. B. 572
LEGG, S. P., CURNOW, D. H. & SIMPSON, S. A. The seasonal and species distribution of oestrogen in British pasture plants xix
LESLIE, I. *see* DAVIDSON, J. N. xl
LESTER SMITH, E. *see* ROWLEY, D. 157
LEUPIN, E. The influence of corticosteroids on deamination in the surviving diaphragm 567
LEUPIN, E. & VERZÁR, F. Glycogen formation and glucose uptake of isolated muscle with 11-deoxycorticosterone and 11-dehydro-17-hydroxycorticosterone 562
LEVVY, G. A. *see* KERR, L. M. H. 278
LIJINSKY, W. *see* GARTON, G. A. xxxv
LINDAN, O. *see* CRUMPLER, H. R. xx
LINDBERG, O. & ERNSTER, L. The turnover of radioactive phosphate injected into the subarachnoid space of the brain of the rat 43
LINDSAY, M., O'DONNELL, T. V. & EDSON, N. L. The oxidation of pyruvate and fatty acids by *Mycobacterium ranae* 248
LONG, C. The respiration of rat-liver slices in the presence of some aliphatic amines, hydroxy amines and quaternary ammonium salts 21
LOWTHER, A. G. *see* BLACKBURN, S. xxvii; CHALLENGER, F. xviii
LUCAS, C. C. *see* MCARTHUR, C. S. 226

MCARTHUR, C. S. & LUCAS, C. C. Oral toxicity and lipotropic potency of the triethyl homologue of choline 226
MCCARTHY, E. F. *see* DALGARNO, A. 162
MCILWAIN, H. Properties of preparations from the central nervous system which degrade coenzymes I and II; their connexion with carbohydrate metabolism 612
MCILWAIN, H. & GRINYER, I. Concentration or exclusion of some heterocyclic compounds by brain cortex, in relation to their effects on carbohydrate metabolism 620
MACLAGAN, N. F. *see* WILKINSON, J. H. xxvii
MCNAUGHT, M. L., OWEN, E. C. & SMITH, J. A. B. The utilization of non-protein nitrogen in the bovine rumen. 6. The effect of metals on the activity of the rumen bacteria 36
MCNAUGHT, M. L., SMITH, J. A. B., HENRY, K. M. & KON, S. K. The utilization of non-protein nitrogen in the bovine rumen. 5. The isolation and nutritive value of a preparation of dried rumen bacteria 32
MCSWINEY, R. R., NICHOLAS, R. E. H. & PRUNTY, F. T. G. The porphyrins of acute prophyria. The detection of hitherto unrecognized porphyrins 147
MALPRESS, F. H. & MORRISON, A. B. Studies on the synthesis of lactose by the mammary gland. 1. Precursors 307
MANN, P. J. G. *see* KENTEN, R. H. 67
MANN, T. & PARSONS, U. Studies on the metabolism of semen. 6. Role of hormones. Effect of castration, hypophysectomy and diabetes. Relation between blood glucose and seminal fructose 440
MARKHAM, R. & SMITH, J. D. Chromatographic studies on nucleic acids. 3. The nucleic acids of five strains of tobacco mosaic virus 513
MARKHAM, R. *see also* SMITH, J. D. 509
MARRIAN, G. F. *see* PATERSON, J. Y. F. xxix; SOMMERVILLE, I. F. 285, 290; VERLY, W. G. 186
MARTIN, A. J. P. *see* HOWARD, G. A. 532
MARTIN, N. H. & PERKINS, D. J. The interactions of purified serum albumins with calcium xvi

*Merivale, W. H. H. A case of virilizing tumour of the ovary xii
Morgan, W. T. J. *see* Aminoff, D. 426
Morris, C. J. O. R. *see* Cortis-Jones, B. 173
Morris, P. *see* Cortis-Jones, B. 173
Morrison, A. B. *see* Malpress, F. H. 307
Moyle, V. *see* Baldwin, E. xli; Dresel, E. I. B. xxxiii
Muir, H. *see* Popják, G. 103

Najjar, V. A. & Gale, E. F. The assimilation of amino-acids by bacteria. 9. The passage of lysine across the cell wall of *Streptococcus faecalis* 91
Neale, F. C. *see* Bray, H. G. 267, 506
Needham, D. M. *see* Chiu, C. Y. 114
Neuberger, A. *see* Elliott, D. F. 207
Newhouse, J. P. & Klyne, W. An apparatus for the continuous extraction of reducing steroids from urine xxiii
Newton, G. G. F. & Abraham, E. P. Ayfivin and bacitracin xxxii
Nicholas, R. E. H. *see* McSwiney, R. R. 147

O'Donnell, T. V. *see* Lindsay, M. 248
Ogston, A. G. & Stanier, J. E. On the state of hyaluronic acid in synovial fluid 364
Ogston, A. G. *see also* Davies, R. E. 324
Ord, M. G. & Thompson, R. H. S. The distribution of cholinesterase types in autonomically innervated tissues ix
Ord, M. G. & Thompson, R. H. S. The distribution of cholinesterase types in mammalian tissues 346
Owen, E. C. *see* McNaught, M. L. 36

Page, J. E. *see* Clayton, J. C. 598
Painter, H. A. & Zilva, S. S. The influence of L-ascorbic acid on the disappearance of the phenolic group of L-tyrosine in the presence of guinea pig-liver suspensions 542
Parke, D. V. & Williams, R. T. Iodometric and turbidimetric determination of mercapturic acids in urine. Mercapturic acid excretion of rabbits receiving benzene xxxiv
Parke, D. V. & Williams, R. T. Studies in detoxication. 30. The metabolism of benzene. (*a*) The determination of benzene. (*b*) The elimination of unchanged benzene by rabbits 236
Parnes, I. & Wertheimer, E. Effect of acetate on glycogen synthesis and glucose utilization in the isolated diaphragm of rats 517
Parnes, I. & Wertheimer, E. Effect of acetate on the glycogen synthesis *in vivo* 520
*Parsons, R. & Webster, T. A. An improved micro acid-digestion tube xxiv
Parsons, U. *see* Mann, T. 440
Partridge, S. M., Brimley, R. C. & Pepper, K. W. Displacement chromatography on synthetic ion-exchange resins. 5. Separation of the basic amino-acids 334
Partridge, S. M. *see also* Gottschalk, A. vi
*Paterson, J. C. S. *see* Bearn, A. G. xxiii
Paterson, J. Y. F., Cox, R. I. & Marrian, G. F. Some observations on the adreno-cortical steroids in human urine xxix
Pepper, K. W. *see* Partridge, S. M. 334
Perkins, D. J. *see* Martin, N. H. xvi
Peters, R. A. *see* Coxon, R. V. 300
Phillips, D. M. P. *see* Butler, J. A. V. 74
§Pitt-Rivers, R. The biological oxidation of alicyclic amino-acids in mammals iii
Popják, G. Preparation of solid samples for assay of ^{14}C. *Appendix* 2 *to* Synthesis of cholesterol and fatty acids in foetuses and in mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 560
Popják, G. Water bath suitable for the maintenance of temperatures to within $\pm 1{\cdot}5 \times 10^{-3}$ °. Micropipette for the accurate delivery of small volumes. *Appendix* 1 *to* Synthesis of cholesterol and fatty acids in foetuses and in mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 558
Popják, G. & Beeckmans, M.-L. Are phospholipins transmitted through the placenta? 99
Popják, G. & Beeckmans, M.-L. Synthesis of cholesterol and fatty acids in foetuses and in mammary glands of pregnant rabbits 547
Popják, G., French, T. H. & Folley, S. J. Utilization of acetate for milk-fat synthesis in the lactating goat xxviii
Popják, G. & Muir, H. In search of a phospholipin precursor 103
Porter, R. R. A chemical study of rabbit antiovalbumin 473
Porter, R. R. The formation of a specific inhibitor by hydrolysis of rabbit antiovalbumin 479
Porter, R. R. The reactivity of the iminazole ring in proteins 304
Prunty, F. T. G. *see* McSwiney, R. R. 147

Raistrick, H. *see* Howard, B. H. 49
Ramsay, W. N. M. Iron metabolism and haemoglobin formation in the embryonated hen egg. 1. The overall production of haem pigments during incubation 168
Ray, S. C. *see* King, E. J. xxvi
Rees, K. R. *see* Datta, S. P. xxxvi
Reis, J. L. Studies on 5-nucleotidase and its distribution in human tissues xxi
Rimington, C. *see* Hubbard, R. 220
Roberts, P. W. *see* Rowley, D. 157
Rossiter, R. J. *see* Burt, N. S. 569
Rowley, D., Cooper, P. D., Roberts, P. W. & Lester Smith, E. The site of action of penicillin. 1. Uptake of penicillin on bacteria 157

Salem, H. M. & Crook, E. M. Production and utilization of methylglyoxal by tissue xxxvii
Saunders, B. C. & Watson, G. H. R. Studies in peroxidase action. 4. The oxidation of 4-methoxy-2:6-dimethylaniline. Suggestions for a mechanism 629
*Scarlet, P. *see* Fraser, R. xxvi
§Schoental, R. The oxidation of aromatic rings by purely chemical means i
Sellers, K. C. *see* Eden, E. 261
Sheahan, M. M. *see* Wilkinson, J. H. xxvii
*Sherlock, S. *see* Bearn, A. G. xxiii
Shorland, F. B. *see* Brooker, E. G. 80
Simpson, S. A. *see* Legg, S. P. xix
Simpson, S. D. & Young, L. Biochemical studies of toxic agents. 1. Experiments with radioactive 2:3-dimercaptopropanol (British anti-lewisite) 634
Slater, E. C. The components of the dihydrocozymase oxidase system 484
Slater, E. C. The dihydrocozymase-cytochrome *c* reductase activity of heart-muscle preparation 499
Smellie, R. M. S. *see* Davidson, J. N. xl
Smith, H. The virulence-enhancing factor of mucins. 1. A biological assay of virulence-enhancing activity 352
Smith, H. The virulence-enhancing factor of mucins. 2. Fractionation studies on hog gastric mucin 356
Smith, J. A. B. *see* McNaught, M. L. 32, 36
Smith, J. D. & Markham, R. Chromatographic studies on nucleic acids. 2. The quantitative analysis of ribonucleic acids 509
Smith, J. D. *see also* Markham, R. 513
§Smith, J. N. The orientation of biochemically introduced hydroxyl groups in benzene derivatives in the animal body i

SMITH, J. N. & WILLIAMS, R. T. Studies in detoxication. 31. The isolation of *m*- and *p*-cyanophenols as metabolites of cyanobenzene (benzonitrile) and the problem of the orientation of hydroxyl groups formed *in vivo* 243
SMITH, M. J. H. & TALBOT, J. M. A method for the rapid estimation of salicylates in serum or plasma v
SOMERS, G. F. *see* CLAYTON, J. C. 598
SOMMERVILLE, I. F. & MARRIAN, G. F. Urinary excretion of pregnanediol in human subjects following the administration of progesterone and of pregnane-3α:20α-diol. 1 285
SOMMERVILLE, I. F. & MARRIAN, G. F. Urinary excretion of pregnanediol in human subjects following the administration of progesterone and of pregnane-3α:20α-diol. 2 290
SOMMERVILLE, I. F. *see also* VERLY, W. G. 186
SPENCER, B. & WILLIAMS, R. T. Studies in detoxication. 32. The influence of bromobenzene and cystine on the bromine content of the hair of rats 460, xv
SPENCER, B. & WILLIAMS, R. T. The metabolism of halogenobenzenes. Isolation of a dihydrodihydroxychlorobenzene and other metabolites from chlorobenzene urine xv
SPINKS, A. Determination of β-naphthoxyethanol in blood 178
SPINKS, A. Metabolism of β-naphthoxyethanol in the rabbit 182
SRISUKH, S. *see* GOODWIN, T. W. xvii
STACEY, M. *see* KAYE, M. A. G. xiii; LAWSON, G. J. xiii
STACK, M. V. Organic constituents of dentine xi
STANIER, J. E. *see* OGSTON, A. G. 364
STEPHEN, J. M. L. *see* BUTLER, J. A. V. 74
STIVEN, J. *see* BLASCHKO, H. 88
SYNGE, R. L. M. & TISELIUS, A. Fractionation of hydrolysis products of amylose by electrokinetic ultrafiltration in an agar-agar jelly xli

TALBOT, J. M. *see* SMITH, M. J. H. v
TÁRNOKY, A. L. Some properties of acridane and 2-chloro-7-methoxyacridane: their possible relationship to excretion products of mepacrine 297
TÁRNOKY, A. L. The relationship of acridanes to the metabolism of mepacrine in man xxi
THOMPSON, R. H. S. *see* ORD, M. G. 346, ix
THOMPSON, S. Y., COATES, M. E. & KON, S. K. The conversion of carotene to vitamin A in the intestine of the chick xxx
THOMPSON, S. Y. *see also* COATES, M. E. xxx
THOMSON, R. Y. *see* DAVIDSON, J. N. xl
THORPE, W. V. *see* BRAY, H. G. 267, 271, 275, 506
TISELIUS, A. *see* SYNGE, R. L. M. xli

VERLY, W. G., SOMMERVILLE, I. F. & MARRIAN, G. F. The quantitative determination and identification of pregnane-3α:20α-diol in the urine of the pregnant rabbit 186
VERZÁR, F. *see* LEUPIN, E. 562

WALKER, A. D. *see* EMERY, W. B. 572
*WALKER, P. G. & KING, E. J. Preparation, titration curves and enzyme hydrolysis of carboxyphenylphosphates xxiii
WALKER, P. G. *see also* KING, E. J. xxiv
WATERS, J. W. Biochemical and clinical changes in the rabbit lens during alloxan diabetes 575
WATKINS, W. M. *see* AMINOFF, D. 426
WATSON, G. H. R. *see* SAUNDERS, B. C. 629
*WEBSTER, T. A. *see* PARSONS, R. xxiv
WERTHEIMER, E. *see* PARNES, I. 517, 520
WHITE, J. C. Investigations on some cellular stain reactions xxiv
WHITE, K. *see* BRAY, H. G. 271, 275
WHITEHEAD, J. K. *see* BENTLEY, H. R. 341
WILKINSON, J. F. *see* GARDIKAS, C. 85
WILKINSON, J. H., SHEAHAN, M. M. & MACLAGAN, N. F. The effect of *n*-alkyl 3:5-diido-4-hydroxybenzoates on oxygen consumption in mice xxvii
WILLIAMS, R. T. *see* DODGSON, K. S. 124; PARKE, D. V. 236, xxxiv; SMITH, J. N. 243; SPENCER, B. 460, xv
WOODS, D. D. Obituary notice of Marjory Stevenson 377
WOOLLETT, E. A. *see* CLAYTON, J. C. 598
*WOOTTON, I. D. P. The nature of 'inactive haemoglobin' xxi
*WOOTTON, V. Comparative studies of bile salts xi
WOOTTON, V. *see also* HASLEWOOD, G. A. D. x
WORK, E. A new naturally occurring amino-acid v
WORK, T. S. *see* HARRIS, J. I. 190, 196, 582

§YOUNG, L. The oxidation of polycyclic hydrocarbons in the animal body ii
YOUNG, L. *see also* SIMPSON, S. D. 634

ZILVA, S. S. *see* PAINTER, H. A. 542

Index of Subjects

Note. Entries marked with an asterisk (*) refer to communications made in title only. Entries marked with a section mark (§) refer to contributions made to Symposia. Small roman numerals refer to pages in *Proceedings of the Biochemical Society*

Absorption, hydrolysis and esterification of vitamin A during (Eden, E. & Sellers, K. C.) 261

Absorption of the mono-sodium salt of thyroxine labelled with radioactive iodine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598

Absorption spectra, ultraviolet, of acridane and of 2-chloro-7-methoxyacridane (Tárnoky, A. L.) 297

Acceptors, reaction in catalase peroxide complexes (Chance, B. & Herbert, D.) 402

Accumulation, rate of, calculation in isotope experiments (Popják, G. & Beeckmans, M.-L.) 547

Acetate and biosynthesis of prodigiosin (Hubbard, R. & Rimington, C.) 220

Acetate as substrate for mammary gland slices (Folley, S. J. & French, T. H.) 465

Acetate, effect on glycogen synthesis and glucose utilization in isolated diaphragm of rats (Parnes, I. & Wertheimer, E.) 517

Acetate, effect on glycogen synthesis *in vivo* (Parnes, I. & Wertheimer, E.) 520

Acetate, incorporation into cholesterol and fatty acids of rabbit foetus of ^{14}C from (Popják, G. & Beeckmans, M.-L.) 547

Acetate metabolism of lactating mammary gland slices (Folley, S. J. & French, T. H.) 465

Acetate, oxidation by *Mycobacterium ranae* (Lindsay, M., O'Donnell, T. V. & Edson, N. L.) 248

Acetate, utilization for milk-fat synthesis in the lactating goat (Popják, G., French, T. H. & Folley, S. J.) xxviii

Acetylcholine, hydrolysis by rat tissues (Ord, M. G. & Thompson, R. H. S.) 346

N-Acetylhexosamine residues in human blood-group A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426

Acetyl-β-methylcholine, hydrolysis by rat tissues (Ord, M. G. & Thompson, R. H. S.) 346

*Acid-digestion tube (Parsons, R. & Webster, T. A.) xxiv

Acid formation of mammary gland slices (Folley, S. J. & French, T. H.) 465

Acid, hydrochloric, site of production in the stomach (Bradford, N. M. & Davies, R. E.) 414

Acid utilization by lactating mammary gland slices (Folley, S. J. & French, T. H.) 465

Acids, fatty, autoxidation of (Ellis, G. W.) 129

Acids, fatty, separation by reversed-phase partition chromatography (Howard, G. A. & Martin, A. J. P.) 532

Acids, fatty, synthesis in foetuses and in mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 547

*Acids, volatile fatty, in *Ascaris lumbricoides* (Baldwin, E. & Moyle, V.) xli

cis-Aconitic anhydride, colour reagent for trimethylamine (Cromwell, B.) 578

Acridane, properties of (Tárnoky, A. L.) 297

Acridanes, relationship to the metabolism of mepacrine in man (Tárnoky, A. L.) xxi

Active state of muscle, thermodynamics of (Hill, A. V.) xli

*Active state of muscle, thermodynamics of, equipment and methods (Hill, A. V.) xlii

Adipose tissue, brown, supplementary enzyme in (Creasey, N. H. & Gray, C. H.) ix

Adrenal cortical preparations, effect of addition *in vitro* on carbohydrate metabolism of liver slices (Chiu, C. Y. & Needham, D. M.) 114; (Chiu, C. Y.) 120

Adreno-cortical steroids in human urine (Paterson, J. Y. F., Cox, R. I. & Marrian, G. F.) xxix

Adrenocorticotrophin, pituitary (Cortis-Jones, B., Crooke, A. C., Henly, A. A., Morris, P. & Morris, C. J. O. R.) 173

Aerobic glycolysis in brain-cortex slices (McIlwain, H. & Grinyer, I.) 620

Agar-agar jelly, fractionation of hydrolysis products of amylose by electrokinetic ultrafiltration in (Synge, R. L. M. & Tiselius, A.) xli

Aglycones, cardiac, molecular rotations of (Klyne, W.) xxii

Alanine as terminal amino-acid of γ-globulin (Porter, R. R.) 473

Albumin A, serum, δ-boundary during electrophoresis of (Charlwood, P. A.) 312

Albumins, reactivity of iminazole rings (Porter, R. R.) 304

Albumins, serum, interaction with calcium (Martin, N. H. & Perkins, D. J.) xvi

Algae, marine, peptides occurring in (Haas, P.) 503

§Alicyclic amino-acids in mammals, biological oxidation of (Pitt-Rivers, R.) iii

n-Alkyl 3:5-diiodo-4-hydroxybenzoates, effect on oxygen consumption in mice (Wilkinson, J. H., Sheahan, M. M. & Maclagan, N. F.) xxvii

n-Alkyltrimethylammonium bromides, decarboxylation of glutamate by (Hughes, D. E.) 231

Alloxan diabetes, biochemical and clinical changes in the rabbit lens during (Waters, J. W.) 575

Alumina, chromatography of 2:4-dinitrophenylhydrazones of ketoacids on (Datta, S. P., Harris, H. & Rees, K. R.) xxxvi

Amines, aliphatic, respiration of rat-liver slices in the presence of (Long, C.) 21

Amines, hydroxy, respiration of rat-liver slices in the presence of (Long, C.) 21

Amino-acid, a new, from *Corynebacterium diphtheriae* (Work, E.) v

D-Amino-acid oxidase, mammalian, oxidation of synthetic α-amino-acids by (Bender, A. E. & Krebs, H. A.) 210

L-Amino-acid oxidase of cobra venom, oxidation of synthetic α-amino-acids by (Bender, A. E. & Krebs, H. A.) 210

L- and D-Amino-acid oxidase of *Neurospora crassa*, oxidation of synthetic α-amino-acids by (Bender, A. E. & Krebs, H. A.) 210

Amino-acid pattern in human foetal and maternal plasma at delivery (Crumpler, H. R., Dent, C. E. & Lindan, O.) xx

Amino-acid-polysaccharide complex, A substance as (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426

§Amino-acids, alicyclic, biological oxidation in mammals (Pitt-Rivers, R.) iii

Amino-acids, assimilation by bacteria (Najjar, V. A. & Gale, E. F.) 91

Amino-acids, avidity for the ions of heavy metals (Albert, A.) xxxix

Amino-acids, basic, separation of (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334

Amino-acids, effect on passage of lysine across bacterial cell wall (Najjar, V. A. & Gale, E. F.) 91

Amino-acids, interaction with sugars (Gottschalk, A. & Partridge, S. M.) vi
Amino-acids of A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Amino-acids, separation by paper chromatography, use of water-miscible solvents for (Bentley, H. R. & Whitehead, J. K.) 341
α-Amino-acids, synthetic, oxidation of (Bender, A. E. & Krebs, H. A.) 210
2-Aminohydroxypyridines, synthesis of (Bray, H. G., Neale, F. C. & Thorpe, W. V.) 506
Ammonia production by rat diaphragm (Leupin, E.) 567
Ammonium salts and biosynthesis of prodigiosin (Hubbard, R. & Rimington, C.) 220
Ammonium salts, quaternary, respiration of rat-liver slices in the presence of (Long, C.) 21
Amphipods, nitrogenous excretion of (Dresel, E. I. B. & Moyle, V.) xxxiii
β-Amylase, effect on the amylopectin constituent of potato starch (Hopkins, R. H. & Jha, B. K.) 319
β-Amylase, selective hydrolysis of amylopectin and amylose (Hopkins, R. H. & Jha, B. K.) 319
Amylopectin, selective hydrolysis by β-amylase (Hopkins, R. H. & Jha, B. K.) 319
Amylose, fractionation of hydrolysis products by electrokinetic ultrafiltration in an agar-agar jelly (Synge, R. L. M. & Tiselius, A.) xli
Amylose, selective hydrolysis by β-amylase (Hopkins, R. H. & Jha, B. K.) 319
Anaemia, pernicious, and growth factor for *Leuconostoc citrovorum* (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Anaesthetic, properties of β-naphthoxyethanol as (Spinks, A.) 178
Aneurin activity, anti-, of bracken (Evans, W. C., Jones, N. R. & Evans, R. A.) xxxviii
Aneurin pyrophosphate, effect on the formation of citrate and α-ketoglutarate by pigeon-brain homogenates (Coxon, R. V. & Peters, R. A.) 300
Anion-exchange resin, adsorption of vitamin B_{12} on (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Anterior pituitary glands, fractionation of (Cortis-Jones, B., Crooke, A. C., Henly, A. A., Morris, P. & Morris, C. J. O. R.) 173
Anthraquinone, 4:5-dihydroxy-2-methyl-, in *Penicillium islandicum* Sopp (Howard, B. H. & Raistrick, H.) 49
Anti-aneurin activity of bracken (Evans, W. C., Jones, N. R. & Evans, R. A.) xxxviii
Antibiotic activity of algae peptides (Haas, P.) 503
Antibiotic peptides, significance of optical configuration in (Harris, J. I. & Work, T. S.) 582
Antibodies, nature and formation of (Porter, R. R.) 473
Antigen of *Clostridium welchii* (Bidwell, E.) 589
Antiovalbumin, rabbit, a chemical study of (Porter, R. R.) 473
Antiovalbumin, rabbit, formation of a specific inhibitor by hydrolysis of (Porter, R. R.) 479
Aorta, solution of elastic fibres by elastase (Baló, J. & Banga, I.) 384
Arabinose as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Arginine, ^{15}N content of, after feeding glycine to rats and rabbits (Elliott, D. F. & Neuberger, A.) 207
§Aromatic rings, oxidation by chemical means (Schoental, R.) i
§Aromatic rings, oxidation by micro-organisms in metabolism (Happold, F. C.) iv
§Aromatization, biological, of hydroaromatic compounds (Dickens, F.) iii
**Ascaris lumbricoides*, volatile fatty acids in (Baldwin, E. & Moyle, V.) xli
L-Ascorbic acid, influence on the disappearance of the phenolic group of L-tyrosine in the presence of guinea pig-liver suspensions (Painter, H. A. & Zilva, S. S.) 542
Assay of ^{14}C, preparation of solid samples for (Popják, G.) 560
Assimilation of amino-acids by bacteria (Najjar, V. A. & Gale, E. F.) 91
Autoxidation of fatty acids (Ellis, G. W.) 129
Avidity of amino-acids for the ions of heavy metals (Albert, A.) xxxix
Ayfivin, antibiotic (Newton, G. G. F. & Abraham, E. P.) xxxii
Azelaic acid from elaidic and oleic acids by autoxidation (Ellis, G. W.) 129
Azide as inhibitor of dihydrocozymase oxidase activity (Slater, E. C.) 484
Azotobacter chroöcoccum, structure of specific polysaccharide of (Lawson, G. J. & Stacey, M.) xiii

Bacillus prodigiosus (*Serratia marcescens*), the tripyrrylmethene pigment from (Hubbard, R. & Rimington, C.) 220
Bacitracin, relationship to ayfivin (Newton, G. G. F. & Abraham, E. P.) xxxii
Bacteria, assimilation of amino-acids by (Najjar, V. A. & Gale, E. F.) 91
Bacteria, attachment of penicillin to (Rowley, D., Cooper, P. D., Roberts, P. W. & Lester Smith, E.) 157
Bacteria, dried rumen, isolation and nutritive value of a preparation of (McNaught, M. L., Smith, J. A. B., Henry, K. M. & Kon, S. K.) 32
Bacteria, lysine analogues as inhibitors of growth of (Harris, J. I. & Work, T. S.) 190
Bacteria, rumen, effect of metals on the activity of (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Bacteria, uptake of penicillin on (Rowley, D., Cooper, P. D., Roberts, P. W. & Lester Smith, E.) 157
Bacterial cell, possible function of non-ionic and ionic lipids for (Kodicek, E.) xiv
Bacterium typhosum, use in assay of virulence-enhancing factor of mucins (Smith, H.) 352
BAL, *see* 2:3-Dimercaptopropanol
Bases, univalent, swelling of collagen in solutions of (Bowes, J. H. & Kenten, R. H.) 524
Basic dyes, transport across gastric mucosa (Bradford, N. M. & Davies, R. E.) 414
Benzene derivatives, orientation of hydroxyl groups in (Smith, J. N.) i
Benzene, mercapturic acid excretion of rabbits receiving (Parke, D. V. & Williams, R. T.) xxxiv
Benzene, metabolism of, in rabbit (Parke, D. V. & Williams, R. T.) 236
Benzoic acid, metabolism in rabbit (Smith, J. N. & Williams, R. T.) 243
Benzoylcholine, hydrolysis by rat tissues (Ord, M. G. & Thompson, R. H. S.) 346
Benzoylcholine, inhibition of cholinesterase by (Aldridge, W. N.) 451
Bile of rats, iodine in, after administration of radioactive thyroxine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Bile pigments, fluorimetric determination of (Gardikas, C., Kench, J. E. & Wilkinson, J. F.) 85
Bile pigment precursor in haemoglobin (Gardikas, C., Kench, J. E. & Wilkinson, J. F.) 85
Bile pigment precursor in normal human erythrocytes (Gardikas, C., Kench, J. E. & Wilkinson, J. F.) 85
*Bile salts, comparative study of (Wootton, V.) xi
Bile salts, nature of pythonic acid (Haslewood, G. A. D. & Wootton, V.) x
Bile salts, preliminary survey of (Haslewood, G. A. D. & Wootton, V.) x

Bis(dimethylamino)-phosphonus anhydride, fate in rabbit (Gardiner, J. E. & Kilby, B. A.) xxxii
Bivalent bases, swelling of collagen in solutions of (Bowes, J. H. & Kenten, R. H.) 524
Blood, a method for the rapid estimation of salicylates in (Smith, M. J. H. & Talbot, J. M.) v
Blood cells, rabbit, lipids of (Burt, N. S. & Rossiter, R. J.) 569
Blood, determination of iodine in (Fraser, R. & Scarlet, P.) xxvi
Blood, determination of β-naphthoxyethanol in (Spinks, A.) 178
*Blood, estimation of trichloroethylene in (Brain, F. H. & Helliwell, P.) xi
*Blood flow, splanchnic, utilization of the hepatic vein catheterization technique for observations in man (Bearn, A. G., Billing, B. H., Paterson, J. C. S. & Sherlock, S.) xxiii
Blood-group A substance, human, isolation and properties of (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Blood-group A substance, physico-chemical examination of (Kekwick, R. A.) 438
Blood group activity of mucins, relation to virulence-enhancing activity (Smith, H.) 356
δ-Boundary during electrophoresis of horse-serum albumin A (Charlwood, P. A.) 312
Bracken (*Pteris aquilina*), anti-aneurin activity of (Evans, W. C., Jones, N. R. & Evans, R. A.) xxxviii
Brain cortex, concentration or exclusion of some heterocyclic compounds by, in relation to their effects on carbohydrate metabolism (McIlwain, H. & Grinyer, I.) 620
Brain-cortex slices, effect of heterocyclic compounds on (McIlwain, H. & Grinyer, I.) 620
Brain, cozymase degrading system of (McIlwain, H.) 612
Brain homogenates, pigeon, effect of oxygen and of cocarboxylase on the formation of citrate and α-ketoglutarate by (Coxon, R. V. & Peters, R. A.) 300
Brain pyrophosphatase, properties of (Gordon, J. J.) 96
Brain, rat, turnover of radioactive phosphate injected into the subarachnoid space of (Lindberg, O. & Ernster, L.) 43
Breast tissue, proliferating, glucuronidase activity of (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
British anti-lewisite (BAL) *see* 2:3-Dimercaptopropanol
Bromobenzene, influence on bromine content of rat hair (Spencer, B. & Williams, R. T.) 460
Brown adipose tissue, supplementary enzyme in (Creasey, N. H. & Gray, C. H.) ix

Calcium, interaction of serum albumin with (Martin, N. H. & Perkins, D. J.) xvi
Carbohydrate in liver slices, effect of eschatin on (Chiu, C. Y. & Needham, D. M.) 114
Carbohydrate metabolism, connexion with the properties of preparations from the central nervous system which degrade coenzymes I and II (McIlwain, H.) 612
Carbohydrate metabolism of liver slices, effect of adrenal cortical preparations added *in vitro* (Chiu, C. Y. & Needham, D. M.) 114; (Chiu, C. Y.) 120
Carbohydrate metabolism, relation of the concentration or exclusion of some heterocyclic compounds by brain cortex to their effects on (McIlwain, H. & Grinyer, I.) 620
Carbohydrate synthesis in liver slices, effect of steroids on (Chiu, C. Y.) 120
Carbon in biological materials, a new apparatus for the determination of, by wet combustion (Hockenhull, D. J. D.) 605
Carbon monoxide as inhibitor of dihydrocozymase oxidase activity (Slater, E. C.) 484
Carbon, radioactive, preparation of solid samples for assay of (Popják, G.) 560
Carbon, radioactive, use in synthesis of cholesterol and fatty acids in foetuses and in mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 547
*Carboxyphenylphosphates, preparation, titration curves and enzyme hydrolysis of (Walker, P. G. & King, E. J.) xxiii
Cardiac aglycones, molecular rotations of (Klyne, W.) xxii
β-Carotene, biogenesis in the fungus *Phycomyces blakesleeanus* (Garton, G. A., Goodwin, T. W. & Lijinsky, W.) xxxv
Carotene, conversion to vitamin A in the intestine of pig and rat (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Carotene, conversion to vitamin A in the intestine of the chick (Thompson, S. Y., Coates, M. E. & Kon, S. K.) xxx
Casein supplement administered to ewes, utilization by ruminal and duodenal fistulae (Cuthbertson, D. P. & Chalmers, M. I.) xvii
Castration, disappearance of fructose and citric acid from seminal plasma as a result of (Mann, T. & Parsons, U.) 440
Castration, effect on metabolism of semen (Mann, T. & Parsons, U.) 440
Catalase, bacterial, enzyme-substrate compounds of (Chance, B. & Herbert, D.) 402
Catalase, reactions in the presence of the notatin system (Chance, B.) 387
*Catheterization technique, hepatic vein, utilization for observations on the splanchnic blood flow in man (Bearn, A. G., Billing, B. H., Paterson, J. C. S. & Sherlock, S.) xxiii
Cell, bacterial, possible function of non-ionic and ionic lipids for (Kodicek, E.) xiv
Cell wall of *Streptococcus faecalis*, passage of lysine across (Najjar, V. A. & Gale, E. F.) 91
Cells, rabbit blood, lipids of (Burt, N. S. & Rossiter, R. J.) 569
Cellular stain reactions (White, J. C.) xxiv
Central nervous system, degradation of coenzymes I and II by preparations from (McIlwain, H.) 612
Cetyltrimethylammonium bromide (Cetavlon), decarboxylation of glutamate by (Hughes, D. E.) 231
Chenopodium vulvaria L., micro-estimation and origin of trimethylamine in (Cromwell, B. T.) 578
Chick embryo, chemical changes related to the deoxyribonucleic acid content of the nucleus (Davidson, J. N., Leslie, I., Smellie, R. M. S. & Thomson, R. Y.) xl
Chick intestine, conversion of carotene to vitamin A in (Thompson, S. Y., Coates, M. E. & Kon, S. K.) xxx
Chicks, measurement of vitamin B_{12} by biological assay with (Coates, M. E., Harrison, G. F. & Kon, S. K.) vii
Chicks, production for the assay of vitamin B_{12} (Black, D. J. G., Getty, J., Coates, M. E., Harrison, G. F. & Kon, S. K.) viii
Chlorobenzene urine, isolation of dihydrodihydroxychlorobenzene from (Spencer, B. & Williams, R. T.) xv
2-Chloro-7-methoxyacridane, properties and possible relationship to excretion products of mepacrine (Tárnoky, A. L.) 297
2- and 3-Chloro-4-methoxyphenols, synthesis of (Dodgson, K. S., Smith, J. N. & Williams, R. T.) 124
3-Chloro-4-methoxyphenylglucuronidamide, isolation from rabbit urine (Dodgson, K. S., Smith, J. N. & Williams, R. T.) 124
Chlorophenylalanines, action of enzymes on (Blaschko, H. & Stiven, J.) 88
Chloroquinol, orientation of glucuronic acid conjugation in (Dodgson, K. S., Smith, J. N. & Williams, R. T.) 124
Cholesterol, synthesis in foetuses and mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 547
Choline chloride, respiration of rat-liver slices in presence of (Long, C.) 21

Choline, liberation of trimethylamine from, by enzymes of *Chenopodium vulvaria* L. (Cromwell, B.) 578
Choline, triethyl homologue of, oral toxicity and lipotropic action of (McArthur, C. S. & Lucas, C. C.) 226
Cholinesterase, inhibition by diethyl *p*-nitrophenyl thiophosphate and analogues (Aldridge, W. N.) 451
Cholinesterase types, distribution in autonomically innervated tissues (Ord, M. G. & Thompson, R. H. S.) ix
Cholinesterase types, distribution in mammalian tissues (Ord, M. G. & Thompson, R. H. S.) 346
Chromatography, displacement, on synthetic ion-exchange resins (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Chromatography, mass-production two-way paper, apparatus for (Datta, S. P., Dent, C. E. & Harris, H.) xlii
Chromatography of 2:4-dinitrophenylhydrazones of keto-acids on alumina (Datta, S. P., Harris, H. & Rees, K. R.) xxxvi
Chromatography of nucleic acids (Smith, J. D. & Markham, R.) 509; (Markham, R. & Smith, J. D.) 513
Chromatography, paper, application to metabolic studies of hydroxybenzoic acids and amides in rabbit (Bray, H. G., Thorpe, W. V. & White, K.) 271
Chromatography, paper partition, separation of *N*-2:4-dinitrophenylamino-acids by (Blackburn, S. & Lowther, A. G.) xxvii
Chromatography, paper, water-miscible solvents in the separation of amino-acids by (Bentley, H. R. & Whitehead, K. J.) 341
Chromatography, reversed-phase partition, separation of C_{12}–C_{18} fatty acids by (Howard, G. A. & Martin, A. J. P.) 532
Chrysophanic acid in *Penicillium islandicum* Sopp (Howard, B. H. & Raistrick, H.) 49
Chymotrypsin, formation of insulin core by action of (Butler, J. A. V., Phillips, D. M. P., Stephen, J. M. L. & Creeth, J. M.) 74
Citrate formation by pigeon-brain homogenates, effect of oxygen and cocarboxylase (Coxon, R. V. & Peters, R. A.) 300
Citric acid, disappearance from seminal plasma through castration (Mann, T. & Parsons, U.) 440
Clostridium welchii, decarboxylation of glutamate by (Hughes, D. E.) 231
Clostridium welchii, proteolytic enzymes of (Bidwell, E.) 589
Coal dust, admixed, increase in the silicosis-producing effects of small amounts of quartz by (King, E. J., Ray, S. C. & Harrison, C. V.) xxvi
Cobalt, effect on the activity of rumen bacteria (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Cobra venom, L-amino-acid oxidase of, oxidation of synthetic α-amino-acids by (Bender, A. E. & Krebs, H. A.) 210
Cocarboxylase, effect on formation of citrate and α-keto-glutarate by pigeon-brain homogenates (Coxon, R. V. & Peters, R. A.) 300
Coenzyme I, differentiation of N^1-methylnicotinamide from (Carpenter, K. J. & Kodicek, E.) 421
Coenzyme I, fluorescence due to (Carpenter, K. J. & Kodicek, E.) 421
Coenzymes I and II, degradation by preparations from the central nervous system (McIlwain, H.) 612
Colchicine, effect on glucuronidase activity (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Collagen, swelling of, in alkaline solutions (Bowes, J. H. & Kenten, R. H.) 1, 524; (Bowes, J. H.) 530
Collagenase, comparison with λ-enzyme of *Clostridium welchii* (Bidwell, E.) 589
Coloration, locust, biochemical description of (Goodwin, T. W. & Srisukh, S.) xvii
Colorimeter, photoelectric, Haldane haemoglobin determinations with (King, E. J. & Geiser, M.) xxv
Colouring matter of *Penicillium islandicum* Sopp (Howard, B. H. & Raistrick, H.) 49
Combustion, wet, a new apparatus for the determination of carbon in biological materials by (Hockenhull, D. J. D.) 605
Complexes of soil organic matter (Forsyth, W. G. C.) 141
Configuration, optical, significance in antibiotic peptides (Harris, J. I. & Work, T. S.) 196, 582
Conjugates of oxidation products of benzene in rabbit (Parke, D. V. & Williams, R. T.) 236
Conjugation, glucuronic acid, in chloroquinol, orientation of (Dodgson, K. S., Smith, J. N. & Williams, R. T.) 124
Conjugation of hydroxybenzoic acids in rabbit (Bray, H. G., Thorpe, W. V. & White, K.) 271
Constant temperature bath, suitable for the maintenance of temperatures to within $\pm 1{\cdot}5 \times 10^{-3}°$ (Popják, G.) 558
Copper, effect on the activity of rumen bacteria (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Copper-retaining power of a humic acid from peat soil (Lees, H.) 450
Coproporphyrins in faeces, liver and urine in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Corallina officinalis, peptides of (Haas, P.) 503
Corallina squamata, peptides of (Haas, P.) 503
Core, insulin, properties of (Butler, J. A. V., Phillips, D. M. P., Stephen, J. M. L. & Creeth, J. M.) 74
Cortex, brain, concentration or exclusion of some heterocyclic compounds by, in relation to their effects on carbohydrate metabolism (McIlwain, H. & Grinyer, I.) 620
Cortical preparations, adrenal, effect of addition *in vitro* on the carbohydrate metabolism of liver slices (Chiu, C. Y. & Needham, D. M.) 114; (Chiu, C. Y.) 120
Cortical steroids in human urine (Paterson, J. Y. F., Cox, R. I. & Marrian, G. F.) xxix
Cortical steroids and carbohydrate metabolism (Leupin, E. & Verzár, F.) 562
Corticosteroids, influence on deamination in the surviving diaphragm (Leupin, E.) 567
Corynebacterium diphtheriae, a new amino-acid from (Work, E.) v
Cow mammary gland, synthesis of lactose by (Malpress, F. H. & Morrison, A. B.) 807
Cozymase, dihydro-, oxidase system (Slater, E. C.) 484
Cozymase metabolism of brain cortex and carbohydrate metabolism (McIlwain, H. & Grinyer, I.) 620
Cresols, metabolism in rabbit (Bray, H. G., Thorpe, W. V. & White, K.) 275
p-Cresylglucuronide, isolation from rabbit urine after feeding cresols (Bray, H. G., Thorpe, W. V. & White, K.) 275
Cyanide as inhibitor of dihydrocozymase oxidase activity (Slater, E. C.) 484
Cyanobenzene (benzonitrile), isolation of *m*- and *p*-cyanophenols as metabolites of (Smith, J. N. & Williams, R. T.) 243
Cyanophenols, *m*- and *p*-, isolation as metabolites of cyanobenzene (benzonitrile) (Smith, J. N. & Williams, R. T.) 243
Cyanophenols, properties and derivatives of (Smith, J. N. & Williams, R. T.) 243
Cyst fluids, ovarian, isolation of blood-group A substance from (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Cystine in partial hydrolysates of wool, peptides of (Consden, R. & Gordon, A. H.) 8
Cystine in wool, oxidation of (Alexander, P., Hudson, R. F. & Fox, M.) 27

Cystine, influence on the bromine content of rat hair (Spencer, B. & Williams, R. T.) 460
Cytochrome, reduction by dihydrocozymase (Slater, E. C.) 484
Cytochrome *b*, reoxidation by fumarate (Slater, E. C.) 484
Cytochrome *c* reductase activity, dihydrocozymase-, of heart-muscle preparation (Slater, E. C.) 499

Deamination, in surviving diaphragm, influence of corticosteroids on (Leupin, E.) 567
Deamination, irreversible, of threonine in rabbit and rat (Elliott, D. F. & Neuberger, A.) 207
Decarboxylases, amino-acid, action on DL-*p*-, *m*- and *o*-chlorophenylalanine (Blaschko, H. & Stiven, J.) 88
Degradation, calculation of rate in isotope experiments (Popják, G. & Beeckmans, M.-L.) 547
11-Dehydrocorticosterone, effect on carbohydrate in liver slices (Chiu, C. Y.) 120
11-Dehydro-17-hydroxycorticosterone and ammonia production by rat diaphragm (Leupin, E.) 567
11-Dehydro-17-hydroxycorticosterone, glycogen formation and glucose uptake of isolated muscle with (Leupin, E. & Verzár, F.) 562
Dental enamel, nitrogen in (Anderson, D. J.) xii
Dentine, organic constituents of (Stack, M. V.) xi
Deoxycorticosterone and ammonia production by rat diaphragm (Leupin, E.) 567
Deoxycorticosterone, effect on carbohydrate synthesis in liver slices (Chiu, C. Y.) 120
11-Deoxycorticosterone, glycogen formation and glucose uptake of isolated muscle with (Leupin, E. & Verzár, F.) 562
Deoxyribonucleic acid content of the nucleus of a developing chick embryo related to chemical changes in (Davidson, J. N., Leslie, I., Smellie, R. M. S. & Thomson, R. Y.) xl
Determination of benzene in rabbit (Parke, D. V. & Williams, R. T.) 236
Detoxication, studies in (Dodgson, K. S., Smith, J. N. & Williams, R. T.) 124; (Parke, D. V. & Williams, R. T.) 236; (Smith, J. N. & Williams, R. T.) 243; Spencer, B. & Williams, R. T.) 460
Deuterium, incorporation into cholesterol and fatty acids of rabbit foetus (Popják, G. & Beeckmans, M.-L.) 547
Deuteroporphyrins in faeces in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
DFP, *see* Di-*iso*propyl fluorophosphonate
Diabetes, alloxan, biochemical and clinical changes in the rabbit lens during (Waters, J. W.) 575
Diabetes, content of fructose in semen in (Mann, T. & Parsons, U.) 440
Diabetes, effect on metabolism of semen (Mann, T. & Parsons, U.) 440
*Diagram, three-dimensional scatter (Hunt, J. N.) xi
αε-Diaminopimelic acid from *Corynebacterium diphtheriae* (Work, E.) v
Diaphorase as component of dihydrocozymase oxidase (Slater, E. C.) 484
Diaphragm of rats, effect of acetate on glycogen synthesis and glucose utilization in (Parnes, I. & Wertheimer, E.) 517
Diaphragm, surviving, influence of corticosteroids on deamination in the (Leupin, E.) 567
Diazine green, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Dichlorodimethylsilane, treatment of kieselguhr with, for reversed-phase partition chromatography (Howard, G. A. & Martin, A. J. P.) 532
Diet and serum protein levels of pregnant ewes, foetuses and young lambs (Dalgarno, A., Godden, W. & McGarthy, E. F.) 162
Diet, protein-deficient, metabolism of rats fed on (Dicker, S. E.) 53
Diethyl *p*-dinitrophenyl phosphate and thiophosphate, inhibition of cholinesterase by (Aldridge, W. N.) 451
Diethyl 8-quinolyl thiophosphate, inhibition of cholinesterase by (Aldridge, W. N.) 451
Diethylbarbiturate, electrophoretic patterns of human serum obtained in (Hoch, H.) 539
Diffusion of human blood-group A substance (Kekwick, R. A.) 438
Diffusion of hyaluronic acid complex from synovial fluid (Ogston, A. G. & Stanier, J. E.) 364
*Digestion tube for acid (Parsons, R. & Webster, T. A.) xxiv
Dihydrocozymase-cytochrome *c* reductase activity in heart-muscle preparation (Slater, E. C.) 499
Dihydrocozymase oxidase activity of heart-muscle and kidney preparations (Slater, E. C.) 484
Dihydrocozymase oxidase-cytochrome *c* reductase activity, inactivation by BAL (Slater, E. C.) 499
Dihydrocozymase oxidase, inhibition of (Slater, E. C.) 484
Dihydrocozymase oxidase system, components of (Slater, R. R.) 484
Dihydrocozymase, reduction of cytochromes by (Slater, E. C.) 484
Dihydrodihydroxychlorobenzene, isolation from chlorobenzene urine (Spencer, B. & Williams, R. T.) xv
3:4-Dihydroxyphenylalanine decarboxylase, mammalian, inactivity of (Blaschko, H. & Stiven, J.) 88
Dihydroxystearic acid, formation of monoacyl derivatives of (Ellis, G. W.) 129
2:5-Dihydroxytoluene, isolation from rabbit urine after feeding cresols (Bray, H. G., Thorpe, W. V. & White, K.) 275
Di-*iso*propyl fluorophosphonate as inhibitor of cholinesterase (Ord, M. G. & Thompson, R. H. S.) 346
Di-*iso*propyl fluorophosphonate, inhibition of cholinesterase by (Aldridge, W. N.) 451
2:3-Dimercaptopropanol and excretion of lead in urine (Baker, R. W. R.) 606
2:3-Dimercaptopropanol as inhibitor of dihydrocozymase system (Slater, E. C.) 484
2:3-Dimercaptopropanol, inactivation of dihydrocozymase-cytochrome *c* reductase activity by (Slater, E. C.) 499
2:3-Dimercaptopropanol, radioactive, experiments with (Simpson, S. D. & Young, L.) 634
2:6-Dimethylbenzoquinone-4-(4′-methoxy-2′:6′-dimethyl) anil, by the oxidation of 4-methoxy-2:6-dimethylaniline by hydrogen peroxide (Saunders, B. C. & Watson, G. H. R.) 629
N-2:4-Dinitrophenylamino-acids, separation by paper partition chromatography (Blackburn, S. & Lowther, A. G.) xvii
2:4-Dinitrophenylhydrazones of ketoacids, chromatography on alumina (Datta, S. P., Harris, H. & Rees, K. R.) xxxvi
Displacement chromatography on synthetic ion-exchange resins (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Disulphide bond, in wool, reaction with oxidizing agents (Alexander, P., Hudson, R. F. & Fox, M.) 27
Disulphide linkages of antibodies (Porter, R. R.) 473
DOPA decarboxylase *see* 3:4-Dihydroxyphenylalanine
Duodenal fistulae, utilization of a casein supplement administered to ewes by (Cuthbertson, D. P. & Chalmers, M. I.) xvii
Dust, admixed coal, increase in the silicosis-producing effect of small amounts of quartz by (King, E. J., Ray, S. C. & Harrison, C. V.) xxvi
Dyes, basic, transport across gastric mucosa (Bradford, N. M. & Davies, R. E.) 414

E 600 *see* Diethyl *p*-nitrophenyl phosphate
E 605 *see* Diethyl *p*-nitrophenyl thiophosphate
Egg, embryonated hen, iron metabolism and haemoglobin formation (Ramsay, W. N. M.) 168
Eggs, hatchability of (Black, D. J. G., Getty, J., Coates, M. E., Harrison, G. F. & Kon, S. K.) viii
Elaidic acids, oily products from (Ellis, G. W.) 129
Elastase, pancreatic (Baló, J. & Banga, I.) 384
Elastin, hydrolysis by pancreatic extracts (Baló, J. & Banga, I.) 384
Elastolytic activity of pancreatic extracts (Baló, J. & Banga, I.) 384
Electrokinetic ultrafiltration in an agar-agar jelly, fractionation of hydrolysis products of amylose by (Synge, R. L. M. & Tiselius, A.) xli
Electrophoresis of human blood-group A substance (Kekwick, R. A.) 438
Electrophoresis of human sera (Hoch, H.) 539
Electrophoresis of sheep serum protein (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Electrophoresis, steady state test for homogeneity in (Hoch, H.) 199
Electrophoretic measurements, valences of protein ions from (Charlwood, P. A.) 312
Embryo, chick, chemical changes related to the deoxyribonucleic acid content of the nucleus (Davidson, J. N., Leslie, I., Smellie, R. M. S. & Thomson, R. Y.) xl
Embryonated hen egg, iron metabolism and haemoglobin formation in (Ramsay, W. N. M.) 168
Enamel, dental, nitrogen in (Anderson, D. J.) xii
Enamel nitrogen, solubility of (Anderson, D. J.) xi
*Enzyme hydrolysis of carboxyphenylphosphates (Walker, P. G. & King, E. J.) xxiii
Enzyme-substrate compounds of bacterial catalase and peroxides (Chance, B. & Herbert, D.) 402
Enzyme, proteolytic, of *Clostridium welchii* (Bidwell, E.) 589
Enzyme, supplementary, in brown adipose tissue (Creasey, N. H. & Gray, C. H.) ix
Epoxy acids from elaidic and oleic acids by autoxidation (Ellis, G. W.) 129
Erythrocytes of rabbit blood (Burt, N. S. & Rossiter, R. J.) 569
Eschatin, effect on synthesis of glycogen (Chiu, C. Y. & Needham, D. M.) 114
Escherichia coli, growth inhibition by lysine analogues (Harris, J. I. & Work, T. S.) 190
Estimation, fluorimetric, of N^1-methylnicotinamide (Carpenter, K. J. & Kodicek, E.) 421
Ethereal sulphate in urine after administration of cyanobenzene to rabbit (Smith, J. N. & Williams, R. T.) 243
Ethyl hydrogen peroxide complexes in bacterial catalase (Chance, B. & Herbert, D.) 402
Ethyl red, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Ewes, pregnant, diet and serum protein levels of (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Ewes, utilization by ruminal and duodenal fistulae of a casein supplement administered to (Cuthbertson, D. P. & Chalmers, M. I.) xvii
Excretion, nitrogenous, of amphipods and isopods (Dresel, E. I. B. & Moyle, V.) xxxiii
Excretion of the mono-sodium salt of thyroxine labelled with radioactive iodine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Extraction, continuous, of reducing steroids from urine, apparatus for (Newhouse, J. P. & Klyne, W.) xxiii

Faeces of rats, iodine in, after administration of radioactive thyroxine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Faeces, porphyrins of, in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Fat, milk, synthesis in the lactating goat, utilization of acetate for (Popják, G., French, T. H. & Folley, S. J.) xxviii
Fat, milk, synthesis of (Folley, S. J. & French, T. H.) 465
Fatty acids, autoxidation of (Ellis, G. W.) 129
Fatty acids, C_{12}–C_{18}, separation of, by reversed-phase partition chromatography (Howard, G. A. & Martin, A. T. P.) 532
Fatty acids, oxidation by *Mycobacterium ranae* (Lindsay, M., O'Donnell, T. V. & Edson, N. L.) 248
Fatty acids, synthesis in foetuses and mammary glands of pregnant rabbits (Popják, G. & Beeckmans, M.-L.) 547
*Fatty acids, volatile, in *Ascaris lumbricoides* (Baldwin, E. & Moyle, V.) xli
Fluorimetric estimation of N^1-methylnicotinamide and its differentiation from coenzyme I (Carpenter, K. J. & Kodicek, E.) 421
1:2:4-Fluorodinitrobenzene, reaction with iminazole groups in proteins (Porter, R. R.) 304
Foetuses, diet and serum protein levels of (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Foetuses, pregnant rabbit, synthesis in (Popják, G. & Beeckmans, M.-L.) 547
Fructose, disappearance from seminal plasma through castration (Mann, T. & Parsons, U.) 440
Fructose, seminal, relation with blood glucose (Mann, T. & Parsons, U.) 440
Fucose in human blood-group A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Fumarate, reoxidation of cytochrome *b* by (Slater, E. C.) 484
Fungus, *Phycomyces blakesleeanus*, biogenesis of β-carotene in (Garton, G. A., Goodwin, T. W. & Lijinsky, W.) xxxv

Galactose as constituents of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Galactose in human blood-group A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Gastric mucin, hog, fractionation of (Smith, H.) 356
Gastric mucosa, secretion of ions by (Davies, R. E. & Ogston, A. G.) 324
Gastric mucosa, transport of basic dyes across (Bradford, N. M. & Davies, R. E.) 414
Gland, mammary, metabolism of (Folley, S. J. & French, T. H.) 465
Globin, reactivity of iminazole rings (Porter, R. R.) 304
γ-Globulin, from rabbit antiovalbumin (Porter, R. R.) 473
Globulin in human sera (Hoch, H.) 539
D-Glucoascorbic acid and degradation of tyrosine by guinea pig-liver suspensions (Painter, H. A. & Zilva, S. S.) 542
Glucose as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Glucose as precursor of seminal fructose in the animal body (Mann, T. & Parsons, U.) 440
Glucose as substrate of mammary gland slices (Folley, S. J. & French, T. H.) 465
Glucose, blood, relation with seminal fructose (Mann, T. & Parsons, U.) 440
Glucose, synthesis of lactose from, in mammary gland (Malpress, F. H. & Morrison, A. B.) 307
Glucose uptake of isolated muscle with 11-deoxycorticosterone and 11-dehydro-17-hydroxycorticosterone (Leupin, E. & Verzár, F.) 562
Glucose utilization, effect of acetate in isolated diaphragm of rats (Parnes, I. & Wertheimer, E.) 517
Glucuronic acid as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Glucuronic acid conjugation in chloroquinol, orientation of (Dodgson, K. S., Smith, H. N. & Williams, R. T.) 124

β-Glucuronidase activity in the mouse (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Glucuronide in urine after administration of cyanobenzene to rabbit (Smith, J. N. & Williams, R. T.) 243
Glutamic acid, ^{15}N content of, after feeding glycine to rats and rabbits (Elliott, D. F. & Neuberger, A.) 207
Glutamic decarboxylase, bacterial, effect of surface-active agents on (Hughes, D. E.) 231
Glutaminase, bacterial, effect of surface-active agents on (Hughes, D. E.) 231
Glycerophosphate, as precursor of phospholipins (Popják, G. & Muir, H.) 103
Glycerophosphate, non-transmission by rabbit placenta (Popják, G. & Beeckmans, M.-L.) 99
Glycine and biosynthesis of prodigiosin (Hubbard, R. & Rimington, C.) 220
Glycine, ^{15}N content of after feeding glycine to rats and rabbits (Elliott, D. F. & Neuberger, A.) 207
Glycogen formation of isolated muscle with 11-deoxycorticosterone and 11-dehydro-17-hydroxycorticosterone (Leupin, E. & Verzár, F.) 562
Glycogen synthesis, effect of acetate in isolated diaphragm of rats (Parnes, I. & Wertheimer, E.) 517
Glycogen synthesis, effect of acetate *in vivo* (Parnes, I. & Wertheimer, E.) 520
Glycogen synthesis, effect of eschatin on (Chiu, C. Y. & Needham, D. M.) 114
Glycogen, synthesis of lactose from, in mammary gland (Malpress, F. H. & Morrison, A. B.) 307
Glycolysis, aerobic, and cozymase degradation (McIlwain, H.) 612
Glycyl-L-tyrosine, action of guinea pig-liver suspensions on (Painter, H. A. & Zilva, S. S.) 542
Glyoxalase, mode of action of (Crook, E. M. & Law, K.) xxxvii
Goat, lactating, utilization of acetate for milk-fat synthesis in (Popják, G., French, T. H. & Folley, S. J.) xxviii
Gonadotrophin, induction of secretion of fructose and citric acid in hypophysectomized animals by the administration of (Mann, T. & Parsons, U.) 440
Gramicidin S, synthesis of peptides related to (Harris, J. I. & Work, T. S.) 196, 582
Griffithsia flosculosa, peptides of (Haas, P.) 503
Growth, bacterial, lysine analogues as inhibitors of (Harris, J. I. & Work, T. S.) 190
Growth factor, for *Leuconostoc citrovorum*, observations on (Emery, W. B., Less, K. A. & Walker, A. D.) 572
Growth inhibitors, effect on glucuronidase activity (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Guanidine and swelling of collagen (Bowes, J. H. & Kenten, R. H.) 524
Guinea pig-liver suspensions, influence of L-ascorbic acid on the disappearance of the phenolic group of L-tyrosine in the presence of (Painter, H. A. & Zilva, S. S.) 542
Guinea pig mammary gland, synthesis of lactose by (Malpress, F. H. & Morrison, A. B.) 307

Haem pigments, production during incubation of hen eggs (Ramsay, W. N. M.) 168
Haematins in catalase (Chance, B.) 387
Haematins of catalase, accessibility of (Chance, B. & Herbert, D.) 402
Haemoglobin formation in the embryonated hen egg (Ramsay, W. N. M.) 168
Haemoglobin, Haldane determinations with the photoelectric colorimeter (King, E. J. & Geiser, M.) xxv
*Haemoglobin, inactive, nature of (Wootton, I. D. P.) xxi
Haemoglobin, reactivity of iminazole rings (Porter, R. R.) 304
Hair, rat, influence of bromobenzene and cystine on the bromine content of (Spencer, B. & Williams, R. T.) 460
Halogenobenzenes, metabolism of (Spencer, B. & Williams, R. T.) xv
Hatchability of eggs (Black, D. J. G., Getty, J., Coates, M. E., Harrison, G. F. & Kon, S. K.) viii
Heart-muscle preparation, the dihydrocozymase-cytochrome *c* reductase activity of (Slater, E. C.) 499
Hen egg, embryonated, iron metabolism and haemoglobin formation in (Ramsay, W. N. M.) 168
*Hepatic vein catheterization technique, utilization for observations on the splanchnic blood flow in man (Bearn, A. G., Billing, B. H., Paterson, J. C. S. & Sherlock, S.) xxiii
Heterocyclic compounds, concentration or exclusion by brain cortex in relation to their effects on carbohydrate metabolism (McIlwain, H. & Grinyer, I.) 620
Hexosamine, *N*-acetyl, residues in human blood-group A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Hog gastric mucin, fractionation of (Smith, H.) 356
Homogeneity, electrophoretic, steady state test for (Hoch, H.) 199
Hormone, adrenocorticotrophic, concentration by fractionation of ox anterior pituitary glands (Cortis-Jones, B., Crooke, A. C., Henly, A. A., Morris, P. & Morris, C. J. O. R.) 173
Hormones, control of formation and composition of seminal plasma by (Mann, T. & Parsons, U.) 440
Hormones, role in metabolism of semen (Mann, T. & Parsons, U.) 440
Hormones, steroid, effects on liver and uterine glucuronidase in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Horse oil, composition in relation to the depot fats on other pasture-fed animals (Brooker, E. G. & Shorland, F. B.) 80
Human blood-group A substance, isolation and properties of (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Humic acid from acid peat, copper-retaining power of (Lees, H.) 450
Hyaluronic acid, chemistry of (Kaye, M. A. G. & Stacey, M.) xiii
Hyaluronic acid in synovial fluid (Ogston, A. G. & Stanier, J. E.) 364
§Hydroaromatic compounds, biological aromatization of (Dickens, F.) iii
§Hydrocarbons, polycyclic, biological significance of metabolism of (Boyland, E.) ii
§Hydrocarbons, polycyclic, oxidation in the animal body (Young, L.) ii
Hydrochloric acid production in the stomach, site of (Bradford, N. M. & Davies, R. E.) 414
Hydrogen peroxide complex with catalase (Chance, B.) 387
Hydrogen peroxide complexes in bacterial catalase (Chance, B. & Herbert, D.) 402
Hydrogen peroxide, oxidation of 4-methoxy-2:6-dimethylaniline by (Saunders, B. C. & Watson, G. H. R.) 629
*Hydrolysis, enzyme, of carboxyphenylphosphates (Walker, P. G. & King, E. J.) xxiii
Hydrolysis of rabbit antiovalbumin (Porter, R. R.) 479
Hydrolysis products of amylose, fractionation by electrokinetic ultrafiltration in an agar-agar jelly (Synge, R. L. M. & Tiselius, A.) xli
Hydroxybenzoic acids and amides in rabbit, application of paper chromatography to metabolic studies of (Bray, H. G., Thorpe, W. V. & White, K.) 271
17-Hydroxy-11-dehydrocorticosterone, effect on carbohydrate synthesis in liver slices (Chiu, C. Y.) 120
Hydroxyl groups formed *in vivo*, orientation of (Smith, J. N. & Williams, R. T.) 243
§Hydroxyl groups in benzene derivatives, orientation of (Smith, J. N.) i

Hydroxyl ion and swelling of collagen (Bowes, J. H. & Kenten, R. H.) 524
Hydroxylamine as inhibitor of dihydrocozymase oxidase activity (Slater, E. C.) 484
Hydroxysulphapyridine, constitution of (Bray, H. G., Neale, F. C. & Thorpe, W. V.) 506
Hypophysectomy, effect on metabolism of semen (Mann, T. & Parsons, U.) 440
Hypophysectomy, effect on secretion of fructose and citric acid (Mann, T. & Parsons, U.) 440

Iminazole ring, reactivity in proteins (Porter, R. R.) 304
Immunochemistry, studies in (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Immunological behaviour of A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
*Inactive haemoglobin, nature of (Wootton, I. D. P.) xxi
Incubation of hen eggs, production of haem pigments during (Ramsay, W. N. M.) 168
Indicators, use to determine the site of hydrochloric acid production in the stomach (Bradford, N. M. & Davies, R. E.) 414
Inhibition of cholinesterase by *p*-nitrophenyl diethyl thiophosphate and analogues (Aldridge, W. N.) 451
Inhibitor, specific, formation by hydrolysis of rabbit anti-ovalbumin (Porter, R. R.) 479
Inhibitors of bacterial growth, lysine analogues of (Harris, J. I. & Work, T. S.) 190
Insulin core, properties of (Butler, J. A. V., Phillips, D. M. P., Stephen, J. M. L. & Creeth, J. M.) 74
Insulin, effect on the fructose level in the semen of diabetic rabbits (Mann, T. & Parsons, U.) 440
Insulin, reactivity of iminazole rings (Porter, R. R.) 304
Intestine, chick, conversion of carotene to vitamin A in (Thompson, S. Y., Coates, M. E. & Kon, S. K.) xxx
Intestine, pig and rat, conversion of carotene to vitamin A in (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Iodide, excretion in urine and faeces after administration of radioactive thyroxine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Iodine, determination in blood and urine (Fraser, R. & Scarlet, P.) xxvi
Iodine, radioactive, absorption and excretion of the monosodium salt of thyroxine labelled with (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Iodoacetate, inhibition of oxidation by *Mycobacterium ranae* (Lindsay, M., O'Donnell, T. V. & Edson, N. L.) 248
Iodometric determination of mercapturic acids in urine (Parke, D. V. & Williams, R. T.) xxxiv
Ion-exchange resins, synthetic, displacement chromatography on (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Ion metabolism changes during the development of oedema in rats fed on protein-deficient diets (Dicker, S. E.) 53
Ions of heavy metals, avidity of amino-acids for (Albert, A.) xxxix
Ions, protein, valences of, from electrophoretic and membrane potential measurements (Charlwood, P. A.) 312
Ions, secretion by gastric mucosa and other tissues (Davies, R. E. & Ogston, A. G.) 324
Iron, effect on the activity of rumen bacteria (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Iron metabolism in the embryonated hen (Ramsay, W. N. M.) 168
Islandicin see 1:4:5-Trihydroxy-2-methylanthraquinone
Isopods, nitrogenous excretion of (Dresel, E. I. B. & Moyle, V.) xxxiii
Isotope experiments, rates of accumulation, synthesis and degradation (Popják, G. & Beeckmans, M.-L.) 547

Janus green as inhibitor of cozymase degradation (McIlwain, H.) 612
Jelly, agar-agar, fractionation of hydrolysis products of amylose by electrokinetic ultrafiltration in (Synge, R. L. M. & Tiselius, A.) xli

Kephalin, mechanism for synthesis of (Popják, G. & Muir, H.) 103
Kephalin, precursors of (Popják, G. & Muir, H.) 103
Keto acids, 2:4-dinitrophenylhydrazones of, chromatography on alumina (Datta, S. P., Harris, H. & Rees, K. R.) xxxvi
Keto acids, $\alpha\beta$-unsaturated, monoacyl derivatives of (Ellis, G. W.) 129
α-Ketoglutarate formation by pigeon brain homogenates, effect of oxygen and cocarboxylase (Coxon, R. V. & Peters, R. A.) 300
β-Ketonic acids from elaidic and oleic acids (Ellis, G. W.) 129
Kidney functions, changes during the development of oedema in rats fed on protein-deficient diets (Dicker, S. E.) 49
Kidney, mouse, β-glucuronidase activity of (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Kidney, pig, D-amino-acid oxidase of (Blaschko, H. & Stiven, J.) 88
Kidney, sheep, oxidation of α-amino-acids in presence of D-amino-acid oxidase of (Bender, A. E. & Krebs, H. A.) 210
Kieselguhr in reversed-phase partition chromatography (Howard, G. A. & Martin, A. J. P.) 532

Lactating goat, utilization of acetate for milk-fat synthesis in (Popják, G., French, T. H. & Folley, S. J.) xxviii
Lactation, acetate metabolism of mammary gland slices during (Folley, S. J. & French, T. H.) 465
β-Lactoglobulin, reaction with fluorodinitrobenzene (Porter, R. R.) 304
Lactose synthesis by the mammary gland (Malpress, F. H. & Morrison, A. B.) 307
Lambs, diet and serum protein levels of (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Lead, in urine, polarographic determination of (Baker, R. W. R.) 606
Lecithin, mechanism for synthesis of (Popják, G. & Muir, H.) 103
Lecithin, precursors of (Popják, G. & Muir, H.) 103
Lens, rabbit, biochemical and clinical changes during alloxan diabetes (Waters, J. W.) 575
Leucine and biosynthesis of prodigiosin (Hubbard, R. & Rimington, C.) 220
Leucocyte-stimulating activity of growth factor for *Leuconostoc citrovorum* (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Leucocytes, polymorphonuclear in rabbit blood, lipids of (Burt, N. S. & Rossiter, R. J.) 569
Leuconostoc citrovorum, growth factor from *Streptomyces griseus* (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Linolenic acid, presence in horse oil (Brooker, E. G. & Shorland, F. B.) 80
Lipids, non-ionic and ionic, possible function for the bacterial cell (Kodicek, E.) xiv
Lipids of rabbit blood cells (Burt, N. S. & Rossiter, R. J.) 569
Lipotropic action of the triethyl homologue of choline (McArthur, C. S. & Lucas, C. C.) 226
Liver, foetal, cholesterol metabolism of fatty acid in (Popják, G. & Beeckmans, M.-L.) 547
Liver, β-glucuronidase activity of in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Liver glycogen in rats (Parnes, I. & Wertheimer, E.) 520

Liver, porphyrins of, in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Liver slices, effect of adrenal cortical preparations added *in vitro* on the carbohydrate metabolism of (Chiu, C. Y. & Needham, D. M.) 114; (Chiu, C. Y.) 120
Liver slices, rat, respiration in the presence of some aliphatic amines, hydroxy amines and quaternary ammonium salts (Long, C.) 21
Liver suspensions, guinea pig, influence of L-ascorbic acid on the disappearance of the phenolic group of L-tyrosine in the presence of (Painter, H. A. & Zilva, S. S.) 542
Locust coloration, biochemical description of (Goodwin, T. W. & Srisukh, S.) xvii
Lymph, transport of vitamin A by (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Lysine analogues as inhibitors of bacterial growth (Harris, J. I. & Work, T. S.) 190
Lysine, passage across the cell wall of *Streptococcus faecalis* (Najjar, V. A. & Gale, E. F.) 91

Magnesium, activation of brain pyrophosphatase by (Gordon, J. J.) 96
Malonate and oxidation of dihydrocozymase (Slater, E. C.) 484
Maltose in the amylopectin constituent of potato starch (Hopkins, R. H. & Jha, B. K.) 319
Mammalian tissues, distribution of cholinesterase types in (Ord, M. G. & Thompson, R. H. S.) 346
§Mammals, biological oxidation of alicyclic amino-acids in (Pitt-Rivers, R.) iii
Mammary gland, metabolism of (Folley, S. J. & French, T. H.) 465
Mammary gland, synthesis of lactose by (Malpress, F. H. & Morrison, A. B.) 307
Mammary glands, of pregnant rabbits, synthesis in (Popják, G. & Beeckmans, M.-L.) 547
Manganese, effect on the activity of rumen bacteria (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Manganese, oxidation by peroxidase systems (Kenten, R. H. & Mann, P. J. G.) 67
Mannose as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Marine algae, peptides occurring in (Haas, P.) 503
Maternal plasma at delivery, amino-acid pattern in (Crumpler, H. R., Dent, C. E. & Lindan, O.) xx
Mating of rabbits, pregnane-3α:20α-diol excretion after (Verly, W. G., Sommerville, I. F. & Marrian, G. F.) 186
Membrane potential measurements, valences of protein ions from (Charlwood, P. A.) 312
Mepacrine excretion products, relationship to acridane and 2-chloro-7-methoxyacridane (Tárnoky, A. L.) 297
Mepacrine, metabolism in man, relationship to acridanes (Tárnoky, A. L.) xxi
Mercapturic acids in urine, iodometric and turbidimetric determination of (Parke, D. V. & Williams, R. T.) xxxiv
§Metabolism of polycyclic hydrocarbons, biological significance of (Boyland, E.) ii
Metabolism of the mammary gland (Folley, S. J. & French, T. H.) 465
Metals, effect on the activity of the rumen bacteria (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Metals, heavy, avidity of amino-acids for the ions of (Albert, A.) xxxix
4-Methoxy-2:6-dimethylaniline, oxidation of (Saunders, B. C. & Watson, G. H. R.) 629
S-Methyl-L-cysteine in cultures of *Scopulariopsis brevicaulis*, formation of methylthiol from (Challenger, F. & Lowther, A. G.) xviii
Methyl ethyl ketone for estimation of N^1-methylnicotinamide (Carpenter, K. J. & Kodicek, E.) 421
Methylglyoxal, production and utilization by tissue (Salem, H. M. & Crook, E. M.) xxxvii
Methyl hydrogen peroxide and catalase (Chance, B.) 387
Methyl hydrogen peroxide complexes in bacterial catalase (Chance, B. & Herbert, D.) 402
N^1-Methylnicotinamide, fluorimetric estimation of and differentiation from coenzyme I (Carpenter, K. J. & Kodicek, E.) 421
N^1-Methylnicotinuric acid betaine, differentiation of fluorescence from that of N^1-methylnicotinamide (Carpenter, K. J. & Kodicek, E.) 421
N-Methyl-2-pyridone-5-carboxylic acid, determination in human urine (Holman, W. I. M. & Lange, D. J. de) 47
Methylthiol, formation from *S*-methyl-L-cysteine in cultures of *Scopulariopsis brevicaulis* (Challenger, F. & Lowther, A. G.) xviii
Mice, effect of *n*-alkyl 3:5-diiodo-3-hydroxybenzoates on the oxygen consumption (Wilkinson, J. H., Sheahan, M. M. & Maclagan, N. F.) xxvii
Microbiological assay of pure vitamin D_2 and vitamin D_3 (Kodicek, E.) xiv
Microbiology, chemical, obituary notice of Marjory Stephenson (Woods, D. D.) 377
§Micro-organisms in metabolism, oxidation of aromatic rings by (Happold, F. C.) iv
Micropipette for the accurate delivery of small volumes (Popják, G.) 558
Milk-fat synthesis (Folley, S. J. & French, T. H.) 465
Milk-fat synthesis in the lactating goat, utilization of acetate for (Popják, G., French, T. H. & Folley, S. J.) xxviii
Mobility, valences of proteins from (Charlwood, P. A.) 312
Mosaic virus, tobacco, nucleic acids from (Markham, R. & Smith, J. D.) 513
Mouse, β-glucuronidase activity in (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Mucins, virulence-enhancing factor of (Smith, H.) 352, 356
Mucoid, A substance as (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Mucosa, gastric, secretion of ions by (Davies, R. E. & Ogston, A. G.) 324
Mucosa, gastric, transport of basic dyes across (Bradford, N. M. & Davies, R. E.) 414
Muscle glycogen in rats (Parnes, I. & Wertheimer, E.) 520
Muscle, isolated, with 11-deoxycorticosterone and 11-dehydro-17-hydroxycorticosterone, glycogen formation and glucose uptake of (Leupin, E. & Verzár, F.) 562
Muscle of rat, absorption of radioactive BAL by (Simpson, S. D. & Young, L.) 634
Muscle preparation, heart, dihydrocozymase-cytochrome *c* reductase activity (Slater, E. C.) 499
Muscle, thermodynamics of the active state of (Hill, A. V.) xli
*Muscle, thermodynamics of the active state of, equipment and methods (Hill, A. V.) xlii
Mycobacterium ranae, oxidation of pyruvate and fatty acids by (Lindsay, M., O'Donnell, T. V. & Edson, N. L.) 248

β-Naphthol in rabbit urine, after feeding β-naphthoxyethanol (Spinks, A.) 182
β-Naphthoxyacetic acid in rabbit urine after feeding β-naphthoxyethanol (Spinks, A.) 182
β-Naphthoxyethanol as an anaesthetic (Spinks, A.) 178
β-Naphthoxyethanol, determination in blood (Spinks, A.) 178
β-Naphthoxyethanol, metabolism in rabbit (Spinks, A.) 182
Nervous system, central, degradation of coenzymes I and II by preparations from (McIlwain, H.) 612
Neurospora crassa, L- and D-amino-acid oxidases of, oxidation of synthetic α-amino-acids by (Bender, A. E. & Krebs, H. A.) 210
Neutral red, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620

Nicotinamide, behaviour with guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Nicotine as inhibitors of cozymase degradation (McIlwain, H.) 612
Nicotine, behaviour with guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Nitrogen as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Nitrogen, enamel, solubility of (Anderson, D. J.) xi
Nitrogen in dental enamel (Anderson, D. J.) xii
Nitrogen mustard, inhibition of cholinesterase by (Aldridge, W. N.) 451
Nitrogen, non-protein, utilization in bovine rumen (McNaught, M. L., Smith, J. A. B., Henry, K. M. & Kon, S. K.) 32; (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Nitrogenous excretion of amphipods and isopods (Dresel, E. I. B. & Moyle, V.) xxxiii
Nonanoic acid (octane-1-carboxylic acid) from elaidic and oleic acids by autoxidation (Ellis, G. W.) 129
Non-protein nitrogen of liver slices, effect of steroids (Chui, C. Y.) 120
Non-protein nitrogen, utilization in bovine rumen (McNaught, M. L., Smith, J. A. B., Henry, K. M. & Kon, S. K.) 32; (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Non-ruminants, metabolism of mammary gland slices (Folley, S. J. & French, T. H.) 465
Notatin system, reactions of catalase in the presence of (Chance, B.) 387
Nucleic acids, chromatography of (Smith, J. D. & Markham, R.) 509
Nucleic acids of tobacco mosaic virus (Markham, R. & Smith, J. D.) 513
5-Nucleotidase and its distribution in human tissues (Reis, J. L.) xxi
Nucleotides, paper chromatography of (Markham, R. & Smith, J. D.) 513
Nucleus of developing chick embryo, relationship between chemical changes and deoxyribonucleic acid content (Davidson, J. N., Leslie, I., Smellie, R. M. S. & Thomson, R. Y.) xl
Nutrition and serum protein levels of pregnant ewes, foetuses and young lambs (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162

Obituary notice, Marjory Stevenson (Woods, D. D.) 377
Octanoic acid (heptane-1-carboxylic acid) from elaidic and oleic acids by autoxidation (Ellis, G. W.) 129
Oedema in rats fed on protein-deficient diets, changes in water and ion metabolism and in kidney function during the development of (Dicker, S. E.) 53
Oestrogen, distribution in British pasture plants (Legg, S. P., Curnow, D. H. & Simpson, S. A.) xix
Oil, horse, composition in relation to the depot fats on other pasture-fed animals (Brooker, E. G. & Shorland, F. B.) 80
Oleic acids, oily products from (Ellis, G. W.) 129
Optical configuration, significance in antibiotic peptides (Harris, J. I. & Work, T. S.) 196
§Orientation of biochemically introduced hydroxyl groups in benzene derivatives (Smith, J. N.) i
Ovarian cyst fluid, isolation of blood-group A substance from (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
*Ovary, virilizing tumour of (Merivale, W. H. H.) xii
Oxidase system dihydrocozymase, components of (Slater, E. C.) 484
Oxidases, amino-acid, action on DL-*p*-, *m*- and *o*-chlorophenylalanine (Blaschko, H. & Stiven, J.) 88
§Oxidation of aromatic rings by chemical means (Schoental, R.) i
§Oxidation of aromatic rings by micro-organisms in metabolism (Happold, F. C.) iv
Oxidation of benzene by rabbits (Parke, D. V. & Williams, R. T.) 236
§Oxidation of polycyclic hydrocarbons in the animal body (Young, L.) ii
Oxidation of various synthetic α-amino-acids (Bender, A. E. & Krebs, H. A.) 210
Oxidation-reduction system of rabbit lens (Waters, J. W.) 575
Oxidizing agents, reaction with wool (Alexander, P., Hudson, R. F. & Fox, M.) 27
Oxygen consumption in mice, effect of *n*-alkyl 3:5-diiodo-4-hydroxybenzoates on (Wilkinson, J. H., Sheahan, M. M. & Maclagan, N. F.) xxvii
Oxygen, effect on formation of citrate and α-ketoglutarate by pigeon-brain homogenates (Coxon, R. V. & Peters, R. A.) 300
Oxygen uptake of liver slices, effect of steroids on (Chiu, C. Y.) 120

Pancreas, elastase of (Baló, J. & Banga, I.) 384
Pancreatic extracts, elastolytic activity of (Baló, J. & Banga, I.) 384
Papain-hydrocyanic acid, hydrolysis of rabbit antiovalbumin by (Porter, R. R.) 479
Paper chromatography, application to metabolic studies of hydroxybenzoic acids and amides in rabbit (Bray, H. G., Thorpe, W. V. & White, K.) 271
Paper chromatography, mass-production two-way, apparatus for (Datta, S. P., Dent, C. E. & Harris, H.) xlii
Paper chromatography of nucleic acids (Markham, R. & Smith, J. D.) 513
Paper chromatography, water-miscible solvents in the separation of amino-acids by (Bentley, H. R. & Whitehead, J. K.) 341
Paper partition chromatography, separation of *N*-2:4-dinitrophenylamino-acids by (Blackburn, S. & Lowther, A. G.) xxvii
Parathion *see* Diethyl *p*-dinitrophenyl thiophosphate
Partition chromatography on paper, separation of *N*-2:4-dinitrophenylamino-acids by (Blackburn, S. & Lowther, A. G.) xxvii
Partition chromatography, reversed-phase, separation of the C_{12}–C_{18} fatty acids by (Howard, G. A. & Martin, A. J. P.) 532
Peat soil, copper-retaining power of a humic acid from (Lees, H.) 450
Pelvetia canaliculata, peptides of (Haas, P.) 503
Penicillin, radioactive, preparation of (Rowley, D., Cooper, P. D., Roberts, P. W. & Lester Smith, E.) 157
Penicillin, site of action of (Rowley, D., Cooper, P. D., Roberts, P. W. & Lester Smith, E.) 157
Penicillium islandicum Sopp, colouring matters of (Howard, B. H. & Raistrick, H.) 49
Pentapeptides related to gramicidin S (Harris, J. I. & Work, T. S.) 582
Peptides occurring in marine algae (Haas, P.) 503
Peptides of cystine in partial hydrolysates of wool (Consden, R. & Gordon, A. H.) 8
Peptides related to gramicidin S, synthesis of (Harris, J. I. & Work, T. S.) 196, 582
Periodate oxidation of polysaccharide complexes from soil (Forsyth, W. G. C.) 141
Pernicious anaemia and growth factor for *Leuconostoc citrovorum* (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Peroxidase action (Saunders, B. & Watson, G. H. R.) 629
Peroxidase systems, oxidation of manganese by (Kenten, R. H. & Mann, P. J. G.) 67
Peroxides, enzyme-substrate compounds of (Chance, B. & Herbert, D.) 402

Phenazine, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Phenazine derivatives as inhibitors of cozymase degradation (McIlwain, H.) 612
Phenolic group of L-tyrosine, influence of L-ascorbic acid on the disappearance of (Painter, H. A. & Zilva, S. S.) 542
Phenosafranine, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620
Phenosafranine as inhibitor of cozymase degradation (McIlwain, H.) 612
D-Phenylalanine in peptides as growth inhibitors (Harris, J. I. & Work, T. S.) 196
Phenylalanines, chloro-, action of enzymes on (Blaschko, H. & Stiven, J.) 88
Phosphatase, King-Armstrong estimation by the determination of liberated phosphate (King, E. J., Abul-Fadl, M. A. M. & Walker, P. G.) xxiv
Phosphate effect in passage of lysine across bacterial cell wall (Najjar, V. A. & Gale, E. F.) 91
Phosphate, electrophoretic patterns of human serum obtained in (Hoch, H.) 539
Phosphate ions, permeability of rabbit embryo cells to (Popják, G. & Beeckmans, M.-L.) 99
Phosphate, liberated, King-Armstrong phosphatase estimation by the determination of (King, E. J., Abul-Fadl, M. A. M. & Walker, P. G.) xxiv
Phosphate, radioactive, turnover in rat brain (Lindberg, O. & Ernster, L.) 43
Phospholipin precursor (Popják, G. & Muir, H.) 103
Phospholipins, transmission through the placenta (Popják, G. & Beeckmans, M.-L.) 99
Phosphomonoesterases, brain, activity compared with brain pyrophosphatase (Gordon, J. J.) 96
Phosphorus, radioactive (Popják, G. & Muir, H.) 103
Photoelectric colorimeter, Haldane haemoglobin determinations with (King, E. J. & Geiser, M.) xxv
Phycomyces blakesleeanus, biogenesis of β-carotene in (Garton, G. A., Goodwin, T. W. & Lijinsky, W.) xxxv
Pig intestine, conversion of carotene to vitamin A in (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Pigeon brain homogenates, effect of oxygen and of co-carboxylase on the formation of citrate and α-ketoglutarate by (Coxon, R. V. & Peters, R. A.) 300
Pigments derived from tryptophan (Fearon, W. R. & Boggust, W. A.) 62
Pigments, haem, production during incubation of hen eggs (Ramsay, W. N. M.) 168
Pigment precursors, bile, in normal human erythrocytes (Gardikas, C., Kench, J. E. & Wilkinson, J. F.) 85
Pipette, micro, for the accurate delivery of small volumes (Popják, G.) 558
Pituitary adrenocorticotrophin (Cortis-Jones, B., Crooke, A. C., Henly, A. A., Morris, P. & Morris, C. J. O. R.) 173
Placenta, rabbit, lipid synthesis in (Popják, G. & Beeckmans, M.-L.) 547
Placenta, transmission of phospholipins through (Popják, G. & Beeckmans, M.-L.) 99
Plants, British pasture, distribution of oestrogen in (Legg, S. P., Curnow, D. H. & Simpson, S. A.) xix
Plasma, a method for the rapid estimation of salicylates in (Smith, M. J. H. & Talbot, J. M.) v
Plasma, foetal and maternal, amino-acid pattern at delivery (Crumpler, H. R., Dent, C. E. & Lindan, O.) xx
Plasma, seminal, disappearance of fructose and citric acid from, as a result of castration (Mann, T. & Parsons, U.) 440
Poisons, toad, molecular rotations of (Klyne, W.) xxii
Polarography, determination of lead in urine by (Baker, R. W. R.) 606
§Polycyclic hydrocarbons, biological significance of metabolism of (Boyland, E.) ii
§Polycyclic hydrocarbons in the animal body, oxidation of (Young, L.) ii
Polysaccharide-amino-acid complex, A substance as (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Polysaccharide of *Azotobacter chroöcoccum*, structure of (Lawson, G. J. & Stacey, M.) xiii
Polysaccharide, soluble, fraction of soil organic matter (Forsyth, W. G. C.) 141
Polystyrene resin, sulphonated, separation of basic amino-acids by (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Porphyria, acute, urinary uroporphyrin in (Gibson, Q. H. & Harrison, D. C.) 154
Porphyria, porphyrins of (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Porphyrins of acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Potential differences, relation to permeability of gastric mucosa (Davies, R. E. & Ogston, A. G.) 324
Precursor, phospholipin (Popják, G. & Muir, H.) 103
Pregnancy, conversion of progesterone to pregnanediol in (Sommerville, I. F. & Marrian, G. F.) 290
Pregnancy, diet and serum protein levels in (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Pregnane-3α:20α-diol, determination and identification in the urine of pregnant rabbits (Verly, W. G., Sommerville, I. F. & Marrian, G. F.) 186
Pregnane-3α:20α-diol, urinary excretion of pregnanediol after administration to human subjects (Sommerville, I. F. & Marrian, G. F.) 285, 290
Pregnant rabbit urine, determination and identification of pregnane-3α:20α-diol in (Verly, W. G., Sommerville, I. F. & Marrian, G. F.) 186
Pregnant rabbits, synthesis of cholesterol and fatty acids in foetuses and in mammary glands of (Popják, G. & Beeckmans, M.-L.) 547
Prodigiosin, biosynthesis of (Hubbard, R. & Rimington, C.) 220
Progesterone, excretion of pregnanediol following administration of (Sommerville, I. F. & Marrian, G. F.) 285, 290
Proliferation and β-glucuronidase activity in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Protein-deficient diets, metabolism of rats fed on (Dicker, S. E.) 53
Protein ion, valences of, from electrophoretic and membrane potential measurements (Charlwood, P. A.) 312
Protein, serum, levels in pregnant ewes, foetuses and young lambs (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Proteins, reactivity of the iminazole ring in (Porter, R. R.) 304
Proteolytic enzymes of *Clostridium welchii* (Bidwell, E.) 589
Protoporphyrins in liver and faeces in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Pteris aquilina (bracken), anti-aneurin activity of (Evans, W. C., Jones, N. R. & Evans, R. A.) xxxviii
Purines of nucleic acids (Markham, R. & Smith, J. D.) 513
Pyridine derivatives as inhibitors of cozymase degradation (McIlwain, H.) 612
Pyridines, aminohydroxy (Bray, H. G., Neale, F. C. & Thorpe, W. V.) 506
2-Pyridone-5-carboxylic acid, *N*-methyl-, in human urine (Holman, W. I. M. & Lange, D. J. de) 47
4(5)-3′-Pyridylglyoxaline as inhibitor of cozymase degradation (McIlwain, H.) 612
Pyrimidines of nucleic acids (Markham, R. & Smith, J. D.) 513

Pyrophosphatase, brain, properties of (Gordon, J. J.) 96
Pyrophosphatase, erythrocyte, activity compared with brain pyrophosphatase (Gordon, J. J.) 96
Pyruvate, oxidation by *Mycobacterium ranae* (Lindsay, M., O'Donnell, T. V. & Edson, N. L.) 248
Pythonic acid, nature of (Haslewood, G. A. D. & Wootton, V.) x

Q2 *see* Diethyl 8-quinolyl thiophosphate
Quartz, silicosis-producing effects, increase by admixed coal dust (King, E. J., Ray, S. C. & Harrison, C. V.) xxvi
Quinoline, absorption by guinea pig-brain cortex (McIlwain, H. & Grinyer, I.) 620

Rabbit antiovalbumin, chemical study of (Porter, R. R.) 473
Rabbit antiovalbumin, formation of a specific inhibitor by hydrolysis of (Porter, R. R.) 479
Rabbit blood cells, lipids of (Burt, N. S. & Rossiter, R. J.) 569
Rabbit, fate of bis(dimethylamino)-phosphonous anhydride (Gardiner, J. E. & Kilby, B. A.) xxxii
Rabbit, irreversible deamination of threonine in (Elliott, D. F. & Neuberger, A.) 207
Rabbit lens, biochemical and clinical changes during alloxan diabetes (Waters, J. W.) 575
Rabbit, metabolism of cresols by (Bray, H. G., Thorpe, W. V. & White, K.) 275
Rabbit, metabolism of hydroxybenzoic acids and amides (Bray, H. G., Thorpe, W. V. & White, K.) 271
Rabbit, metabolism of β-naphthoxyethanol in (Spinks, A.) 182
Rabbit, metabolism of sulphapyridine containing radioactive sulphur (Bray, H. G., Francis, G. E., Neale, F. C. & Thorpe, W. V.) 267
Rabbit urine, pregnant, determination and identification of pregnane-3α:20α-diol in (Verly, W. G., Sommerville, I. F. & Marrian, G. F.) 186
Rabbits, metabolism of benzene in (Parke, D. V. & Williams, R. T.) 236
Rabbits, pregnant, synthesis of cholesterol and fatty acids in foetuses and in mammary glands of (Popják, G. & Beeckmans, M.-L.) 547
Rabbits receiving benzene, mercapturic excretion of (Parke, D. V. & Williams, R. T.) xxxiv
Rabbits, transmission of phospholipins by the placenta of (Popják, G. & Beeckmans, M.-L.) 99
Radioactive tracers *see* elements and compounds concerned
Rat brain, turnover of radioactive phosphate injected into the subarachnoid space of (Lindberg, O. & Ernster, L.) 43
Rat hair, influence of bromobenzene and cystine on bromine content of (Spencer, B. & Williams, R. T.) 460
Rat intestine, conversion of carotene to vitamin A in (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Rat, irreversible deamination of threonine in (Elliott, D. F. & Neuberger, A.) 207
Rat-liver slices, respiration in the presence of some aliphatic amines, hydroxy amines and quaternary ammonium salts (Long, C.) 21
Rat tissues, hydrolysis of acetylcholine, benzoylcholine and acetyl-β-methylcholine by (Ord, M. G. & Thompson, R. H. S.) 346
Rats, effect of acetate on glycogen synthesis and glucose utilization in the isolated diaphragm of (Parnes, I. & Wertheimer, E.) 517
Rats fed on protein-deficient diets, metabolism of (Dicker, S. E.) 53
Rats, liver and muscle glycogen (Parnes, I. & Wertheimer, E.) 520
Red blood cells in rabbit, lipids of (Burt, N. S. & Rossiter, R. J.) 569
Reducing steroids, apparatus for the continuous extraction from urine (Newhouse, J. P. & Klyne, W.) xxiii
Reductase activity of dihydrocozymase-cytochrome *c* of heart-muscle preparation (Slater, E. C.) 499
Resins, exchange, adsorption of vitamin B_{12} by (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Resins, synthetic ion exchange, displacement chromatography on (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Respiration of mammary gland slices (Folley, S. J. & French, T. H.) 465
Respiration of rat-liver slices in the presence of some aliphatic amines, hydroxy amines and quaternary ammonium salts (Long, C.) 21
Reversed-phase partition chromatography, separation of C_{12}–C_{18} fatty acids by (Howard, G. A. & Martin, A. J. P.) 532
Ribonucleic acid as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Ribonucleic acids, quantitative analysis by chromatography (Smith, J. D. & Markham, R.) 509
Ribose as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141
Ribose from yeast nucleic acid (Markham, R. & Smith, J. D.) 513
§Rings, aromatic, oxidation by chemical means (Schoental, R.) i
§Rings, aromatic, oxidation by micro-organisms in metabolism (Happold, F. C.) iv
Rotations, molecular, of cardiac aglycones and toad poisons (Klyne, W.) xxii
Rumen, bovine, utilization of non-protein nitrogen in (McNaught, M. L., Smith, J. A. B., Henry, K. M. & Kon, S. K.) 32; (McNaught, M. L., Owen, E. C. & Smith, J. A. B.) 36
Ruminal fistulae, utilization of a casein supplement administered to ewes by (Cuthbertson, D. P. & Chalmers, M. I.) xvii
Ruminants, metabolism of mammary gland (Folley, S. J. & French, T. H.) 465
Ruminants, respiration and acid production of lactating mammary gland slices from (Folley, S. J. & French, T. H.) 465

Salicylates in serum or plasma, a method for rapid estimation of (Smith, M. J. H. & Talbot, J. M.) v
Samples, solid, preparation of, for assay of ^{14}C (Popják, G.) 560
*Scatter diagram, three-dimensional (Hunt, J. N.) xi
Scopulariopsis brevicaulis, formation of methylthiol from *S*-methyl-L-cysteine in cultures of (Challenger, F. & Lowther, A. G.) xviii
Secretion of ions by gastric mucosa and other tissues (Davies, R. E. & Ogston, A. G.) 324
Sedimentation of human blood-group A substance (Kekwick, R. A.) 438
Sedimentation of hyaluronic acid complex from synovial fluid (Ogston, A. G. & Stanier, J. E.) 364
Semen metabolism, studies on (Mann, T. & Parsons, U.) 440
Sera, human, electrophoresis of (Hoch, H.) 539
Serine, ^{15}N content of, after feeding glycine to rats and rabbits (Elliott, D. F. & Neuberger, A.) 207
Serology, behaviour of A substance (Aminoff, D., Morgan, W. T. J. & Watkins, W. M.) 426
Serratia marcescens see Bacillus prodigiosus
Serum, a method for the rapid estimation of salicylates in (Smith, M. J. H. & Talbot, J. M.) v

Serum albumin A, δ-boundary during electrophoresis of (Charlwood, P. A.) 312
Serum albumins, interaction with calcium (Martin, N. H. & Perkins, D. J.) xvi
Serum protein levels of pregnant ewes, foetuses and young lambs (Dalgarno, A., Godden, W. & McCarthy, E. F.) 162
Serum, rabbit antiovalbumin, γ-globulin from (Porter, R. R.) 473
Sheep kidney, oxidation of α-amino-acids in presence of D-amino-acid oxidase of (Bender, A. E. & Krebs, H. A.) 210
Silicosis-producing effects of small amounts of quartz, increase by admixed coal dust (King, E. J., Ray, S. C. & Harrison, C. V.) xxvi
Skin of rat, absorption of radioactive BAL by (Simpson, S. D. & Young, L.) 634
Soil organic matter, complexes of (Forsyth, W. G. C.) 141
Soil, peat, copper-retaining power of a humic acid from (Lees, H.) 450
Solid samples, preparation of, for assay of ^{14}C (Popják, G.) 560
Solvents, water-miscible, in the separation of amino-acids by paper chromatography (Bentley, H. R. & Whitehead, J. K.) 341
Sorbic acid, effect on glucuronidase activity in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Soret band of the primary catalase-hydrogen peroxide complex (Chance, B.) 387
Soret bands of bacterial and erythrocyte catalases (Chance, B. & Herbert, D.) 402
Spectra of bacterial and erythrocyte catalases (Chance, B. & Herbert, D.) 402
Spinal cord, cozymase degrading system of (McIlwain, H.) 612
*Splanchnic blood flow in man, utilization of the hepatic vein catheterization technique for observations on (Bearn, A. G., Billing, B. H., Paterson, J. C. S. & Sherlock, S.) xxiii
Stain reactions, cellular (White, J. C.) xxiv
Staphylococcus aureus, growth inhibition by lysine analogues (Harris, J. I. & Work, T. S.) 190
Steady state, test for electrophoretic homogeneity (Hoch, H.) 199
Stephenson, Marjory, obituary notice of (Woods, D. D.) 377
Steroid hormones, effects on liver and uterine glucuronidase in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278
Steroids, adreno-cortical, in human urine (Paterson, J. Y. F. Cox, R. I. & Marrian, G. F.) xxix
Steroids, effect on carbohydrate synthesis, oxygen uptake and non-protein nitrogen of liver slices (Chiu, C. Y.) 120
Steroids, reducing, apparatus for the continuous extraction from urine (Newhouse, J. P. & Klyne, W.) xxiii
Stomach, site of hydrochloric acid production in (Bradford, N. M. & Davies, R. E.) 414
Streptococcus faecalis, passage of lysine across cell wall of (Najjar, V. A. & Gale, E. F.) 91
Streptococcus haemolyticus, growth inhibition by lysine analogues (Harris, J. I. & Work, T. S.) 190
Streptomyces griseus, growth factor for *Leuconostoc citrovorum* from (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Studies on semen metabolism (Mann, T. & Parsons, U.) 440
Subarachnoid space of rat brain, turnover of radioactive phosphate injected into (Lindberg, O. & Ernster, L.) 43
Suberic acid from elaidic and oleic acids by autoxidation (Ellis, G. W.) 129
Substrate, enzyme, compounds of bacterial catalase and peroxides (Chance, B. & Herbert, D.) 402
Sugar of nucleic acids (Markham, R. & Smith, J. D.) 513
Sugars, interaction with amino-acids (Gottschalk, A. & Partridge, S. M.) vi
Sulphapyridine containing radioactive sulphur, metabolism in rabbit (Bray, H. G., Francis, G. E., Neale, F. C. & Thorpe, W. V.) 267
Sulphapyridine, hydroxy, constitution of (Bray, H. G., Neale, F. C. & Thorpe, W. V.) 506
Sulphide, as inhibitor of dihydrocozymase oxidase activity (Slater, E. C.) 484
Sulphonated polystyrene resins, separation of basic amino-acids by (Partridge, S. M., Brimley, R. C. & Pepper, K. W.) 334
Sulphur, radioactive, synthesis of BAL, absorption, distribution and excretion (Simpson, S. D. & Young, L.) 634
Sulphur radioactive, use in study of sulphapyridine, metabolism in rabbit (Bray, H. G., Francis, G. E. & Thorpe, W. V.) 267
Sulphydryl of rabbit lens protein (Waters, J. W.) 575
Surface-active agents, effect on bacterial glutamic decarboxylase and glutaminase (Hughes, D. E.) 231
Swelling of collagen in alkaline solutions (Bowes, J. D.) 530; (Bowes, J. H. & Kenten, R. H.) 1, 524
Synovial fluid, hyaluronic acid in (Ogston, A. G. & Stanier, J. E.) 364
Synthesis, calculation of rate in isotope experiments (Popják, G. & Beeckmans, M.-L.) 547

Testosterone, re-establishment of fructose and citric acid in seminal plasma after castration by injection of (Mann, T. & Parsons, U.) 440
Tetramethylammonium hydroxide and swelling of collagen (Bowes, J. H. & Kenten, R. H.) 524
Thermodynamics of the active state of muscle (Hill, A. V.) xli
*Thermodynamics of the active state of muscle, equipment and methods (Hill, A. V.) xlii
Thiophosphate, diethyl *p*-nitrophenyl, inhibition of cholinesterase by (Aldridge, W. N.) 451
*Three-dimensional scatter diagram (Hunt, J. N.) xi
Threonine in rabbit and rat, irreversible deamination of (Elliott, D. F. & Neuberger, A.) 207
Thyroids of rats and cats after administration of radioactive thyroxine (Clayton, J. C., Free, A. A., Page, J. E., Somers, F. G. & Woollett, E. A.) 598
Thyroxine labelled with radioactive iodine, absorption and excretion of the mono-sodium salt of (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Tissue, autonomically innervated, distribution of cholinesterase types in (Ord, M. G. & Thompson, R. H. S.) ix
Tissue, brown adipose, supplementary enzyme in (Creasey, N. H. & Gray, C. H.) ix
Tissue, human, distribution of 5-nucleotidase in (Reis, J. L.) xxi
Tissue, mammalian, distribution of cholinesterase types in (Ord, M. G. & Thompson, R. H. S.) 346
*Titration curves of carboxyphenylphosphates (Walker, P. G. & King, E. J.) xxiii
Toad poisons, molecular rotations of (Klyne, W.) xxii
Tobacco mosaic virus, nucleic acids of (Markham, R. & Smith, J. D.) 513
Toluene derivatives, metabolism of (Bray, H. G., Thorpe, W. V. & White, K.) 275
Toxic agents, biochemical study of (Simpson, S. D. & Young, L.) 634
Toxicity, oral, of the triethyl homologue of choline (McArthur, C. S. & Lucas, C. C.) 226

Toxins of *Clostridium welchii* (Bidwell, E.) 589
*Trichloroethylene, estimation in blood (Brain, F. H. & Helliwell, P.) xi
Triethyl-2-hydroxyethylammonium chloride, oral toxicity and lipotropic potency (McArthur, C. S. & Lucas, C. C.) 226
1:4:5-Trihydroxy-2-methylanthraquinone in *Penicillium islandicum* Sopp (Howard, B. H. & Raistrick, H.) 49
Trimethylamine, micro-estimation and origin in *Chenopodium vulvaria* L. (Cromwell, B. T.) 578
Tripeptides, significance of optical configuration in (Harris, J. I. & Work, T. S.) 196
Tripyrrylmethene pigment from *Bacillus prodigiosus* (Hubbard, R. & Rimington, C.) 220
Tryptochrome, preparation from tryptophan (Fearon, W. R. & Boggust, W. A.) 62
Tryptophan, pigments derived from (Fearon, W. R. & Boggust, W. A.) 62
*Tumour, virilizing, of the ovary (Merivale, W. H. H.) xii
Turbidimetric determination of mercapturic acids in urine (Parke, D. V. & Williams, R. T.) xxxiv
Tyrosine decarboxylase, mammalian, inactivity of (Blaschko, H. & Stiven, J.) 88
L-Tyrosine, influence of L-ascorbic acid on the disappearance of the phenolic group of (Painter, H. A. & Zilva, S. S.) 542
Tyrosine, ^{15}N content after feeding glycine to rats and rabbits (Elliott, D. F. & Neuberger, A.) 207

Ultrafiltration in an agar-agar jelly, electrokinetic fractionation of hydrolysis products of amylose by (Synge, R. L. M. & Tiselius, A.) xli
Ultrafiltration of pituitary adrenocorticotrophin (Cortis-Jones, B., Crooke, A. C., Henly, A. A., Morris, P. & Morris, C. J. O. R.) 173
$\alpha\beta$-Unsaturated keto acids, monacyl derivatives of (Ellis, G. W.) 129
Urinary excretion of pregnanediol in human subjects (Sommerville, I. F. & Marrian, G. F.) 285, 290
Urine, apparatus for the continuous extraction of reducing steroids (Newhouse, J. P. & Klyne, W.) xxiii
Urine, chlorobenzene, isolation of dihydrodihydroxychlorobenzene and other metabolites from (Spencer, B. & Williams, R. T.) xv
Urine, determination of iodine in (Fraser, R. & Scarlet, P.) xxvi
Urine, human, adreno-cortical steroids in (Paterson, J. Y. F., Cox, R. I. & Marrian, G. F.) xxix
Urine, human, determination of *N*-methyl-2-pyridone-5-carboxylic acid in (Holman, W. I. M. & Lange, D. J. de) 47
Urine, iodometric and turbidimetric determination of mercapturic acids in (Parke, D. V. & Williams, R. T.) xxxiv
Urine of rat, sulphur content after administration of radioactive BAL (Simpson, S. D. & Young, L.) 634
Urine of rats, iodine in, after administration of radioactive thyroxine (Clayton, J. C., Free, A. A., Page, J. E., Somers, G. F. & Woollett, E. A.) 598
Urine, polarographic determination of lead in (Baker, R. W. R.) 606
Urine, porphyrins of, in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147; (Gibson, Q. C. & Harrison, D. C.) 154
Urine, pregnant rabbit, determination and identification of pregnane-3α:20α-diol in (Verly, W. G., Sommerville, I. F. & Marrian, G. F.) 186
Urine, rabbit, compounds in, after administration of benzene (Parke, D. V. & Williams, R. T.) 236
Urine, rabbit, compounds in, after administration of cyanobenzene and benzoic acid (Smith, J. N. & Williams, R. T.) 243
Urine, rabbit, β-naphthoxyacetic acid and β-naphthol in, after feeding β-naphthoxyethanol (Spinks, A.) 182
Uroporphyrin in faeces, liver and urine in acute porphyria (McSwiney, R. R., Nicholas, R. E. H. & Prunty, F. T. G.) 147
Uroporphyrin, urinary, in acute porphyria (Gibson, Q. C. & Harrison, D. C.) 154
Urorosein, preparation from tryptophan (Fearon, W. R. & Boggust, W. A.) 62
Uterus, β-glucuronidase activity of, in mice (Kerr, L. M. H., Campbell, J. G. & Levvy, G. A.) 278

Valences of protein ions from electrophoretic and membrane potential (Charlwood, P. A.) 312
*Vein, hepatic, catheterization technique, utilization for observations on the splanchnic blood flow in man (Bearn, A. G., Billing, B. H., Paterson, J. C. S. & Sherlock, S.) xxiii
Venom, cobra, L-amino-acid oxidase of (Blaschko, H. & Stiven, J.) 88
*Virilizing tumour of the ovary (Merivale, W. H. H.) xii
Virulence-enhancing factor of mucins (Smith, H.) 352, 356
Virus, tobacco mosaic, nucleic acids from (Markham, R. & Smith, J. D.) 513
Viscosity of hyaluronic acid complex from synovial fluid (Ogston, A. G. & Stanier, J. E.) 364
Vitamin A, conversion of carotene to, in pig and rat intestine (Coates, M. E., Thompson, S. Y. & Kon, S. K.) xxx
Vitamin A, conversion of carotene to, in the intestine of the chick (Thompson, S. Y., Coates, M. E. & Kon, S. K.) xxx
Vitamin A, free and esterified, micro method for separation (Eden, E.) 259
Vitamin A, hydrolysis and esterification during absorption (Eden, E. & Sellers, K. C.) 261
Vitamin B_{12}, adsorption on exchange resins (Emery, W. B., Lees, K. A. & Walker, A. D.) 572
Vitamin B_{12}, colorimetric assay method for (Fantes, K. H., Ireland, D. M. & Green, N.) xxxiv
Vitamin B_{12}, measurement by biological assay with chicks (Coates, M. E., Harrison, G. F. & Kon, S. K.) vi
Vitamin B_{12}, production of chicks for the assay of (Black, D. J. G., Getty, J., Coates, M. E., Harrison, G. F. & Kon, S. K.) viii
Vitamin D_2, microbiological assay of (Kodicek, K.) xiv
Vitamin D_3, microbiological assay of (Kodicek, K.) xiv

Water bath, suitable for the maintenance of temperatures to within $\pm 1{\cdot}5 \times 10^{-3}$° (Popják, G.) 558
Water metabolism, changes during the development of oedema in rats fed on protein-deficient diets (Dicker, S. E.) 53
Wool partial hydrolysates, peptides of cystine in (Consden, R. & Gordon, A. H.) 8
Wool, reaction of oxidizing agents with (Alexander, P., Hudson, R. F. & Fox, M.) 27

Xylose as constituent of polysaccharide complexes of soil (Forsyth, W. G. C.) 141